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MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS  
FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT  
ON THE  
RIPARIAN AND WETLAND HABITAT CONSERVATION PROGRAM

SEPTEMBER 11, 1995

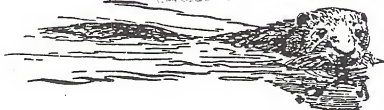
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## EXECUTIVE SUMMARY

### PURPOSE

This document contains the final analysis of the environmental effects associated with the Montana Fish, Wildlife & Parks (FWP) Riparian/Wetland Habitat Conservation Program for the Libby and Hungry Horse hydroelectric projects. This document addresses significant issues raised during public review of the Riparian/Wetland Draft Programmatic Environmental Impact Statement (DEIS); summarizes major conclusions related to environmental effects and issues; and describes FWP's Preferred Alternative (modified from DEIS Proposed Alternative Two).

Four Alternatives were evaluated in the DEIS: One: Status Quo; Two: Prioritized Mix of Protection and Enhancement; Three: Protection Only; Four: Enhancement Only.

Following a 30-day comment period on the FEIS, the FWP Regional Supervisor in Kalispell will issue a Decision Notice describing the final action FWP will make to determine guidelines for the Riparian/Wetland Conservation Program.

### SUMMARY OF MAJOR CONCLUSIONS

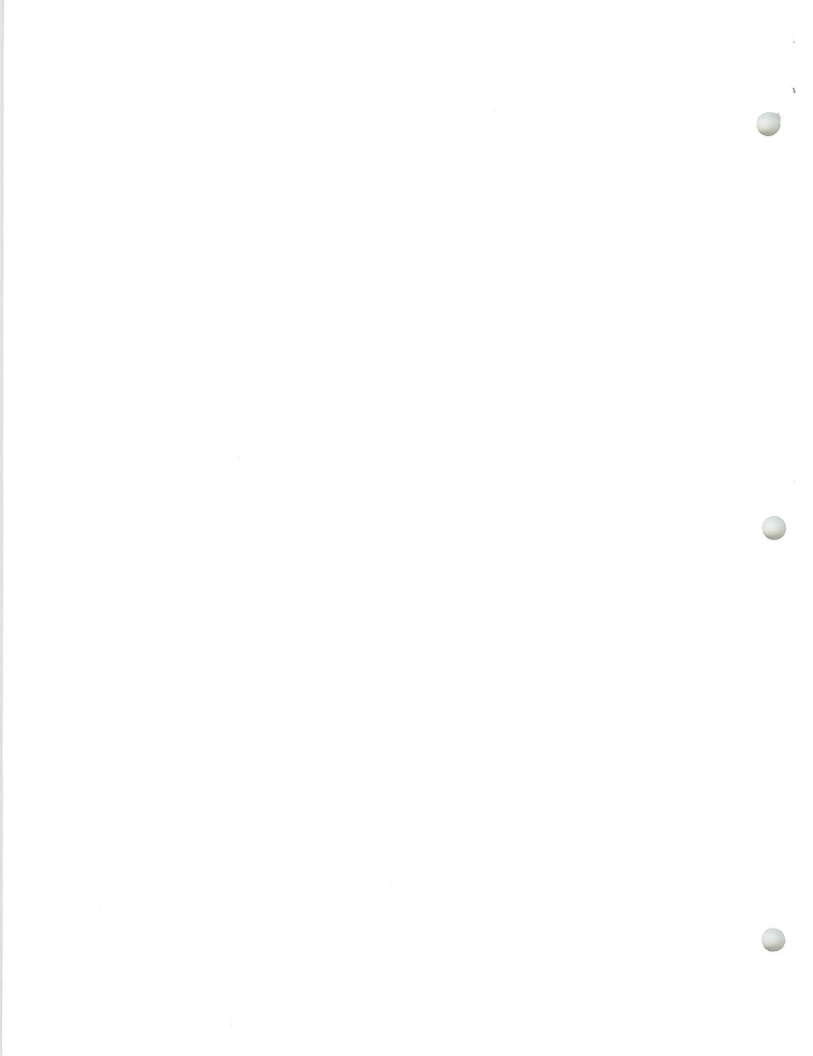
**Physical Impacts:** All of the considered Alternatives, including the Preferred Alternative, would result in a positive direct benefit to the physical and biological environment through the long-term conservation of wetland/riparian habitat values at project areas. The expected benefits may be greater for Alternatives One, Two, and Three than Alternative Four if Alternative Four were to focus on enhancement on public lands and not address resources on private lands.

The cumulative impacts of all the Alternatives (except Alternative One in Lincoln County) to the physical and biological environment would be significantly positive. The cumulative impact on biodiversity and threatened and endangered species habitat would be more positive if currently rare habitats are considered during implementation.

**Social-Economic Impacts - Positive:** Because Alternative One does not include Lincoln County, this alternative would not generate any social or economic benefit or impact to this area. Alternatives Two - Four and the Preferred Alternative would result in positive economic benefits due to an increase or maintenance of outdoor recreation or amenity based economies. Other potential economic benefits to private landowners include an increase in land values by owning land adjacent to perpetual open space and wildlife habitat; possible inheritance and income tax benefits for rural agricultural or timber landowners; financial compensation to landowners who decide to sell development rights or restore/enhance riparian/wetland values, thus precluding the potential for lost land value through zoning or other government regulations that could limit development. These types of benefits were not included in the DEIS.

**Social-Economic Impacts - Negative:** Negative effects could occur to land use and the tax base, depending on the Alternative. We acknowledge that the use of conservation easements under Alternatives Two, Three, and the Preferred Alternative may preclude the future development of some lands to their "highest and best use" and that this may preclude future tax revenues. Under the Preferred Alternative, conservation easements may be used more than under the original Alternative Two for Libby and may result in slightly greater potential negative impacts to future land uses and tax bases.

WILL 515-1127-03



**Cumulative Effects.** Alternatives One and Three could potentially have the greatest cumulative negative impact on local land uses and tax base. The impacts of Alternative Two and the Preferred Alternative would be somewhat less. The cumulative effects of any Alternative on local communities, land use, and taxes would be additive to other mitigation or habitat protection programs occurring within the same area (e.g. Kerr mitigation, Highway mitigation).

## **CONCLUSIONS TO SIGNIFICANT ISSUES:**

**Conservation Strategies:** The primary issue which is being decided through this EIS process is the approach or the method of habitat conservation to be emphasized by this program.

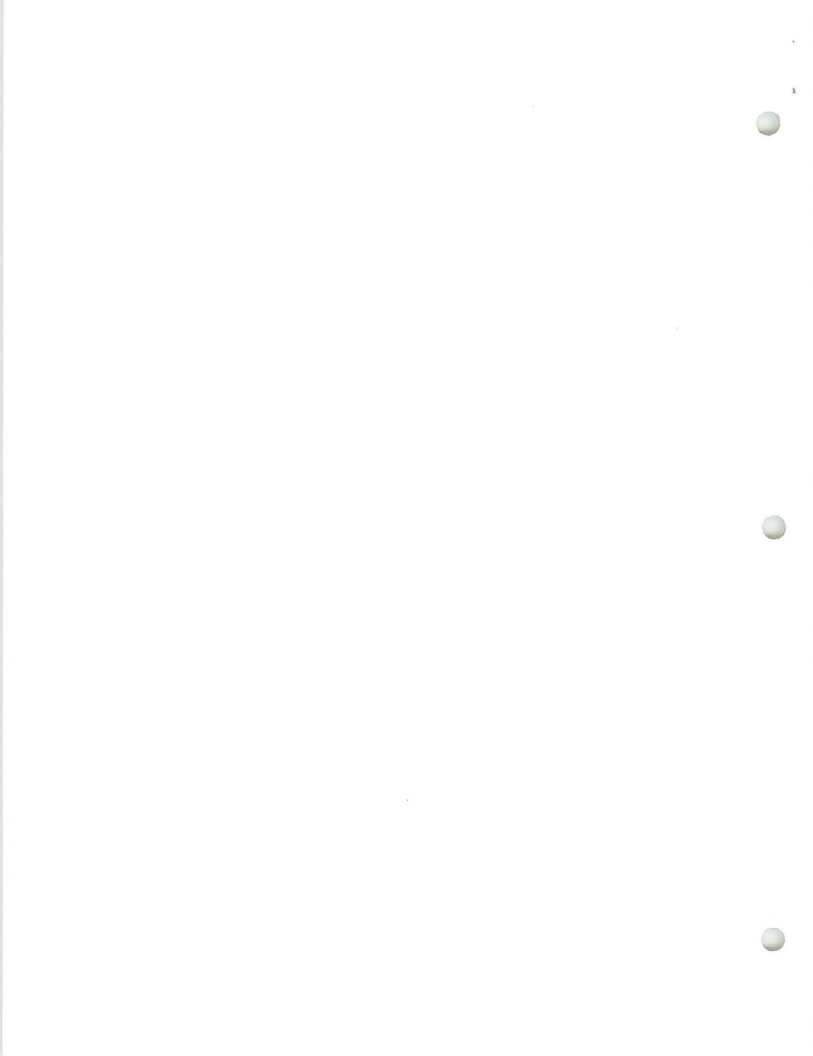
**Mitigation Objectives (Acres):** A proposed change in the existing wildlife mitigation program is to use mitigation objectives based on riparian/wetland habitats lost at the 2 hydroelectric projects rather than target species acres (i.e. waterfowl, black bear/grizzly bear). This change will result in an increase in overall acreage to be mitigated and an expansion from the Flathead area to the Kootenai.

**Program Achievability, Budget, and Time-Frame:** The analysis we completed on this issue shows that the existing funding structure may not be sufficient to achieve Alternatives Two-Four program objectives. As a result, this program may need to leverage available funds, undertake joint projects, cost-share to the fullest extent possible without sacrificing quality projects, and look for other creative means to extend the available funds to reach habitat objectives. We recognize that 100% mitigation may not be achievable.

**Mitigation Project Areas/Distance Factors:** Using a single distance or identifying counties within which riparian/wetland mitigation must occur would result in lopsided project areas for the 2 hydroelectric projects. Further, this approach may be too restrictive during implementation. In response to these concerns and the need to set guidelines for the program, we propose to define 2 or 3 prioritized project areas or levels surrounding each reservoir. For Hungry Horse, project area levels would be defined as within: 1. Flathead River drainage area; 2. Columbia River basin, Montana. For Libby the priority areas would be within: 1. 15 miles of Lake Koocanusa; 2. 50 miles of Lake Koocanusa (includes all of the Kootenai River and portions of Clark Fork drainages); 3. Columbia River basin, Montana.

**Concerns Related to Strategies:** The DEIS discussed 3 major strategies to replace habitat values lost due to hydroelectric power development: fee-title purchase, conservation easements, and enhancement activities. Land exchange was not specifically mentioned in the DEIS but is another strategy which could be used to maintain current private land base while benefitting riparian/wetlands. It could be viewed as a variation of the fee-title strategy as it redistributes land ownership patterns.

We also recognize that the annual goals used in the DEIS to show how the program may be implemented could be constraining during program implementation. To provide adaptability in this program over time and to allow for flexibility in project development, we suggest maintaining the priority ranking similar to Alternative Two in the DEIS without annual goals.



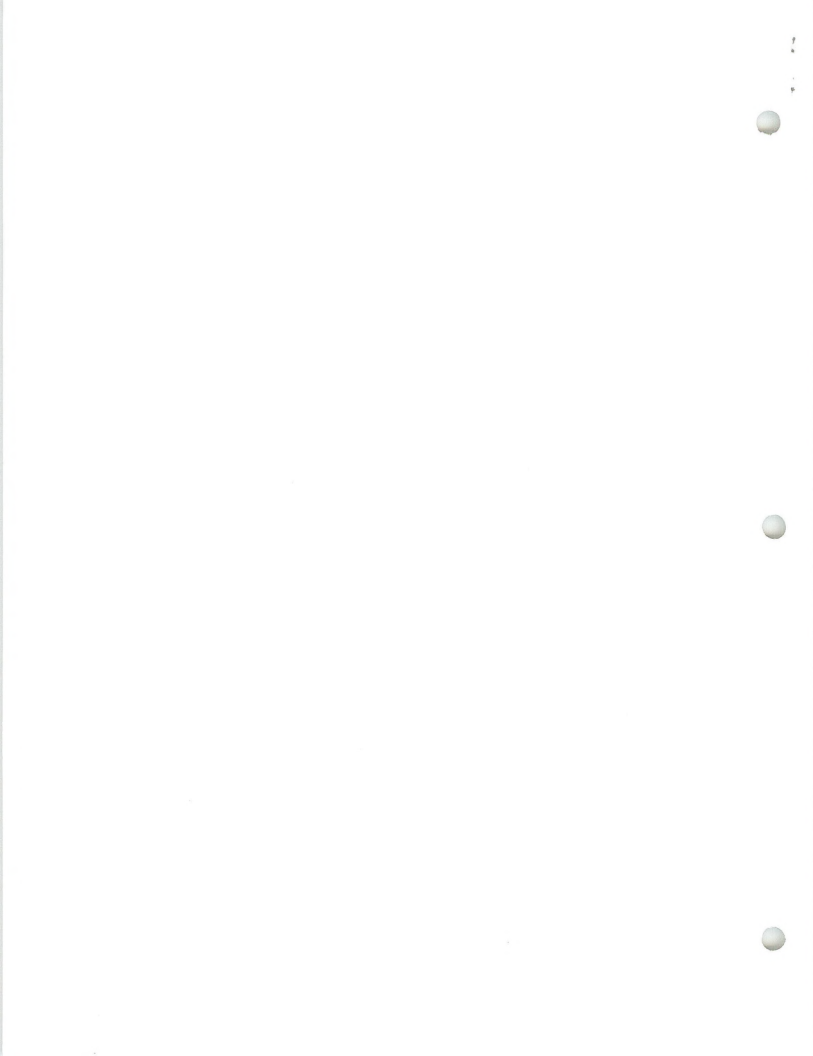
**Confederated Salish and Kootenai Tribal Issues:** The state will meet with the tribal government to clarify the definition of lead agency and ultimate ownership and responsibilities for Riparian/Wetland Conservation projects within the exterior boundaries of the Flathead Indian Reservation; to determine how the state and tribes will coordinate program and project activities and how we will address cultural and other concerns during implementation. Some type of agreement may be necessary to outline policies and procedures.

#### **PRIORITIZED STRATEGIES - HUNGRY HORSE**

1. Conservation easement acquisition through donation, cost-share, partial purchase, or outright purchase with willing landowners.
2. Fee-title purchase with placement of conservation easement and return to private sector if a conservation easement is not an option.
3. Fee-title acquisitions from willing landowners through bargain sale, donation, partnerships, and direct purchase.
4. Long-term riparian/wetland habitat enhancement activities on private, corporate, county, or state lands or on federal lands (i.e. U.S. Fish and Wildlife Service or Forest Service) which is clearly over and above their current budget and management responsibility.
5. Land exchanges with federal, state, corporate entities which result in protection or enhancement of riparian/wetlands.

#### **PRIORITIZED STRATEGIES - LIBBY**

1. Long-term riparian/wetland habitat enhancement activities on private, corporate, county, or state lands or on federal lands (i.e. U.S. Fish and Wildlife Service or Forest Service) which is clearly over and above their current budget and management responsibility.
2. Conservation easement acquisition through donation, cost-share, partial purchase, or outright purchase with willing landowners.
3. Fee-title purchase with placement of conservation easement and return to private sector if a conservation easement is not an option.
4. Land exchanges with federal, state, corporate entities which result in no net gain of public lands yet protects or enhances riparian/wetlands.
5. Fee-title acquisitions from willing landowners through bargain sale, donation, partnerships, or direct purchase.





**MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS**

**FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT**

**ON THE**

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**SEPTEMBER 11, 1995**





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## SECTION I

### INTRODUCTION

#### A. OVERVIEW

##### 1. Purpose

This document contains the final analysis of the environmental effects associated with the Montana Fish, Wildlife & Parks (FWP) Riparian/Wetland Habitat Conservation Program for the Libby and Hungry Horse hydroelectric projects (Fig. 1). This document addresses significant or substantive issues raised during public review of the Riparian/Wetland Draft Programmatic Environmental Impact Statement (DEIS); summarizes major conclusions related to environmental effects and issues; and describes FWP's Preferred Alternative (modified from DEIS Proposed Alternative Two).

##### 2. Report Organization

The first Section includes a description of the decisions to be made and relevant background information. Section II addresses substantive issues raised during the public comment on the DEIS. Comments are organized by subject area followed by specific related individual public comments and FWP responses. Appendix A contains FWP responses to other issues and comments on the DEIS.

Section III provides a summary of major conclusions and supporting information from the DEIS. Section IV describes the modified preferred alternative based on analyses of the environmental data, substantive issues and major conclusions.

A detailed description of the original proposed alternatives and the environmental effects of the alternatives were presented in the DEIS. The FEIS includes summary tables displaying expected physical and social impacts of original alternatives (Appendix B) from the DEIS. Copies of the DEIS can be obtained through FWP Region One Office in Kalispell, 490 N. Meridian Road, Kalispell, MT. 59901 (406-752-5501).

##### 3. Decisions to be Made

The Final Environmental Impact Statement (FEIS) discloses new information in response to public comments on DEIS, addresses issues of concern, summarizes significant findings, and describes the preferred alternative.



Figure 1. Riparian/Wetland Conservation Program area in northwest Montana.

Following a 30-day comment period on the FEIS, the FWP Regional Supervisor in Kalispell will issue a Decision Notice describing the final action or Alternative FWP will select as the program guidelines for the riparian/wetland conservation program.

## **B. BACKGROUND**

### **1. Authority**

FWP is mandated by law (87-1-201) to protect, enhance and regulate the wise use of Montana's fish and wildlife resources for public benefit now and in the future. The Pacific Northwest Electric Power Planning and Conservation Act of 1980 (P.L. 96-501) "authorized the states of Idaho, Montana, Oregon, and Washington to enter into an interstate compact to create a policy-making and planning body, known as the Northwest Power Planning Council (NPPC) for electrical power and the Columbia River basin's fish and wildlife" (NPPC 1987 p.5). One of the primary NPPC tasks was to design a Fish and Wildlife Program to mitigate the impacts of hydroelectric power development on the region's fish and wildlife resources.

### **2. Montana's Wildlife Mitigation Plans**

Pursuant to the NPPC's Fish and Wildlife Program, Montana completed wildlife loss estimates and mitigation plans for the Hungry Horse and Libby hydroelectric facilities in the mid-1980's (Casey and Yde 1984; Yde and Olsen, 1984; Bissell and Yde, 1985; Mundinger and Yde, 1985). FWP lead this effort in cooperation with numerous federal and state agencies, public interest groups, and the Confederated Salish and Kootenai tribes.

In 1987, the Council amended their Fish and Wildlife Program to include specific wildlife mitigation programs for Libby and Hungry Horse hydroelectric dams targeting habitats for waterfowl, black and grizzly bears, Columbian sharp-tailed grouse, and big game species (Appendix C). The proposed waterfowl and black bear/grizzly bear projects contained elements to protect or enhance riparian and wetland habitat types in northwest Montana.

### **3. Montana Wildlife Mitigation Trust Fund**

In December 1988, the State of Montana and Bonneville Power Administration (BPA) signed the Wildlife Mitigation Agreement (Settlement Agreement) for Libby and Hungry Horse Dams which established the Wildlife Mitigation Trust Fund (Trust Fund) with FWP to fund all of the state's wildlife mitigation projects over the life of the licensed hydroelectric projects (60 years). Interest from the Trust provides the funding for implementation of all proposed wildlife mitigation projects. BPA completed their contribution to the Trust Fund in December, 1994. As of May 1995,

the Trust Fund has a balance of nearly 13.5 million dollars. The Settlement Agreement includes stipulations that the Trust Fund must equal or exceed \$8 million from the period of final BPA payment until year 30 of the agreement (2019). The agreement also requires an unobligated balance of \$4 million from year 30 to the end of the agreement to pay for the operation and maintenance of mitigation actions undertaken under the terms of the agreement.

The Settlement Agreement set up a Wildlife Mitigation Advisory Council (WMAC) to oversee review projects and expenditures for the various wildlife mitigation programs. WMAC meets 2 times a year, spring and fall.

#### **4. Montana Environmental Policy Act**

Due to the issues related to habitat protection programs during the early 1990's, FWP made the decision in 1993 to undertake a programmatic EIS on those portions of the BPA wildlife mitigation program which emphasized riparian/wetland habitats. The purpose of the DEIS was to develop alternatives, describe and analyze the impacts of the alternatives on the physical and social environments, and receive public input so that FWP could make a more informed decision on how to implement a riparian/wetland habitat conservation program.

##### **a. Public Scoping**

FWP began the public scoping phase of its DEIS in fall of 1993. Scoping meetings were advertised by legal notices in Helena, Kalispell, and Libby in October of 1993. A FWP press release was distributed in October of 1993. Numerous articles concerning the plan and public scoping were published in northwest Montana newspapers in October of 1993. Over 200 private citizens, landowners, sportspersons, interest groups, and government agencies were mailed background information and notices of public scoping meetings held at the following dates and cities:

<u>City</u>	<u>Date</u>
Polson	10-05-93
Kalispell	10-11-93
Libby	10-18-93
Thompson Falls	10-20-93
Missoula	10-22-93
Eureka	10-25-93

**b. Follow-up Meetings**

In addition to public scoping, 3 public "follow-up" meetings were held in January, 1994 to explain progress made since the original scoping meetings and to collect additional comments relating to the alternatives being developed. The dates of the public "follow-up" meetings were:

<u>City</u>	<u>Date</u>
Libby	01-10-94
Eureka	01-12-94
Kalispell	01-17-94

**c. Issues Evaluated During DEIS Development**

Four significant issues were raised through public scoping and "follow up" meetings. These issues were described in the DEIS (pp. 6-7) and addressed under all the considered Alternatives (One - Four) in the DEIS. The issues were: 1. Land Acquisition, 2. Individual Project Distance From Reservoir, 3. Ecosystem Approach, and 4. Confederated Salish and Kootenai Tribes.

**d. DEIS**

The DEIS was completed and sent out for review to interested parties on May 6, 1994. A total of 3 public hearings were held and facilitated by a FWP attorney in May, 1994 to collect comments related to the DEIS. The public comment period for the DEIS was May 6, 1994 - June 6, 1994. The dates of the public hearings were as follows:

<u>City</u>	<u>Date</u>
Libby	05-18-94
Kalispell	05-19-94
Eureka	05-29-94

FWP received written comments from 9 individuals or organizations and oral comments from 13 individuals during the DEIS public comment period. Continued work on this program was delayed nearly a year due to personnel changes in the Region 1 wildlife staff during 1994 and 1995.





## SECTION II

### ISSUES RAISED BY DEIS AND FWP RESPONSES

#### A. GENERAL INFORMATION

Substantive issues raised by the public are grouped by subject area and followed by FWP responses. Each comment has been assigned a specific alpha-numeric code that identifies the individual or organization commenting and the issue they raised. A "W" indicates written comment; a "H" indicates it was given during public hearing. Each substantive issue is followed by FWP responses. FWP responses to other issues and comments are included in Appendix A. All materials concerning the EIS process are being held in a project file located in Region 1 Office of FWP, 490 North Meridian Rd., Kalispell, MT. 59901.

#### B. SUBSTANTIVE ISSUES

1. Purpose of the EIS; habitat objectives; scope of decisions to be made. (G&T-W2, W3, W12; USFWS-W16)

a. Specific Comments:

- i. "Is the decision whether or not to protect and enhance "prime wetlands" only or to protect and enhance wetlands and riparian areas"? (G&T-W2)
- ii. "The secondary decision is whether to acquire the land, purchase an easement, or enhance habitat on land owned by others... This is a difficult question to address without having site specific information". (G&T-W3)
- iii. "For Alternatives Two, Three, and Four, there will be less acres of prime wetland protected or enhanced and more acres of riparian area protected or enhanced...The nature of the impacts would certainly change (under Alternatives 2-4) but the total benefits gained from the status quo would be small or non-existent" (G&T-W12)
- iv. "Since the Trust Fund which financed this draft EIS is based on the NPPC's Program, it appears that the Department already has the authority to protect and enhance both prime wetland and riparian habitats. We suggest your EIS clarify this situation and account for the riparian habitat protection called for the NPPC program." (USFWS-W16)

**b. FWP Response:**

- i. **Scope of EIS; Decisions:** The major purposes of this EIS process is to look at various alternative mitigation strategies, disclose the various environmental effects of those strategies, and get public input into the decision-making process. The primary substantive issue which is being decided through this EIS process is the approach or the method of habitat conservation to be emphasized by this program. This issue has generated most of the concern and comment. Each of the alternatives was designed to address the issues surrounding the different approaches to habitat conservation i.e. via enhancement, conservation easement, and/or fee-title acquisition. The principal decision FWP is making is to select the alternative or combination of alternatives which will most completely meet the mitigation goals and objectives with the least negative social and environmental impact. Following selection of the preferred alternative, the Department will complete detailed implementation plans describing criteria and priority strategies for specific projects for each of the hydroelectric project areas.
- ii. **Habitat Objectives:** There are clear differences in habitat objectives of Alternative One (Status Quo) and the other Alternatives. The amendment to the NPPC Fish and Wildlife Program set out 2 habitat protection programs which affected riparian/wetlands: 1. waterfowl and 2. black bear/grizzly bear. These programs focused on mitigating for target species impacts. The waterfowl program objective was to protect 4,564 acres of "prime wetlands" <sup>1</sup>; the black bear/grizzly bear program objective was to protect 8,590 acres of riparian, wetland, shrubland areas lost at Hungry Horse <sup>2</sup>. All of the waterfowl program and the riparian portion of the bear program are considered habitat objectives for the Status Quo or No Action Alternative (Table 1).

Alternatives Two, Three, and Four based objectives on actual acreage of riparian and wetland habitats lost at Libby and Hungry Horse. Rather than

---

<sup>1</sup> "Prime wetlands" represent a conversion of all the riparian/wetland habitat types affected by both hydroelectric projects (Libby and Hungry Horse) converted to waterfowl production habitat.

<sup>2</sup> The original black bear/grizzly bear habitat objective of 11,298 acres was based on 5,585 acres of riparian/wetland habitats (49.4%) plus 5,518 ac of upland shrub habitat (50.6%). The 8,590 acreage habitat objective represents the hydropower allocated proportion (76%) of the total 11,298 acres. The 4,243 acre objective in Table 1 represents 49.4% (riparian portion) of the hydropower allocated habitat objective.

use the modified target species acreage described above, the goals of these Alternatives emphasize value and acres of riparian and wetland habitat lost (Table 1). The reasons for the change from target species objectives (Alternative One) to habitat objectives (Alternatives Two through Four) are to: 1. clearly tie objectives to habitat losses; 2. focus primarily on mitigation for habitats lost and secondarily on the species impacted in an effort to mitigate for all wildlife species affected, not just the target species; and 3. provide a better and more direct way to measure the success of the habitat conservation program by habitat (acres) rather than species. A wildlife mitigation plan which addresses actual habitat losses at both reservoirs would better address the overall wildlife impacts than a mitigation program with an artificial goal focusing on certain species losses.

Under Alternatives Two through Four, the remaining upland shrub and travel corridor components of the black bear/grizzly bear program would continue unless another program change is made.

Based on program history, the decision on whether or not to protect wetland and riparian habitats has already been made by the NPPC. Therefore, it was not a major substantive decision of this programmatic EIS process (see Section IB, BACKGROUND and Appendix B).

- iii. **Hydropower Allocation:** The habitat objectives of the Status Quo Alternative differ from the other alternatives not only because they were part of species based program but also because they represented hydropower allocated acreage (Table 1). As part of the amendment to the NPPC fish and wildlife program which authorized the wildlife mitigation projects for Hungry Horse and Libby, Montana agreed that BPA would fund mitigation for that portion of dam construction and operation which was allocated to hydropower production: 79% of Libby and 76% of Hungry Horse. Other benefits of the dams such as irrigation and flood control were not considered part of the mitigation program under the Northwest Power Act. Thus, the funding provided in the Trust Fund primarily reflects the hydropower allocation and not full (100%) mitigation.

Alternatives Two through Four in the DEIS did not use the hydropower allocation formula and, thereby, represented 100% of losses. Table 1 includes both the 100% and the hydropower allocated portions of the habitat objectives for each Alternative.

Table 1. Comparison of mitigation objectives (acres) for Hungry Horse, Libby, and both hydroelectric projects for Alternative One (Status Quo) and the other Alternatives.

HUNGRY HORSE PROJECT AREA

PERCENT ALLOCATION TO HYDROPOWER (%)	ALTERNATIVE ONE (Status Quo)  OBJECTIVES (acres)	ALTERNATIVES TWO-FOUR  OBJECTIVES (acres)
76	4,245 Bear <u>1,146 Waterfowl</u> 5,391 Total	5,303 Riparian/ Wetland
100	5,585 Bear <u>1,508 Waterfowl</u> 7,093 Total	6,978 Riparian/ Wetland

LIBBY PROJECT AREA

79	0 Bear <u>3,418 Waterfowl</u> 3,418 Total	9,261 Riparian/ Wetland
100	0 Bear <u>4,326 Waterfowl</u> 4,326 Total	11,724 Riparian/ Wetland

BOTH HUNGRY HORSE AND LIBBY TOTALS

Hydropower Allocated	4,245 Bear <u>4,564 Waterfowl</u> 8,809 Total	14,564 Riparian/ Wetland
100% Mitigation	5,585 Bear <u>5,834 Waterfowl</u> 11,419 Total	18,702 Riparian/ Wetland

2. Ability of DEIS Alternative to meet program goals; insufficient funds on annual basis to meet objectives. (USFWS-W19, W20, W21, W22, W23; Cole-W26; Illi-W30; Worthington-W33; Cole-H4,H7; McConkey-H21; Fairchild-H24)

a. Specific Comments:

- i. "The monetary amount of the Trust Fund was negotiated between Montana and Bonneville Power Administration at a level needed to accomplish a mitigation-protection-replacement goal of 4,564 acres" ... (alternative 1)... "Under the draft EIS projected rate of alternative implementation" (see Table 2 this document) "only Alternative 1 is funded at a level capable of achieving its objectives during the remaining life of the Trust Fund... It does not appear that Trust Fund monies will be available to fund Alternatives 2 through 4. (USFWS-W19); "
- ii. "We recommend that the EIS depict the current Trust Fund balance and revenue and projected expenditures over the 10-year planning period." (USFWS-W20)...
- iii. "The EIS should also disclose the reality of the proposed time frames for implementation". (USFWS-21)
- iv. "The draft EIS fails to fully disclose the facts about the improbability of accomplishing the subject mitigation due to a lack of funds or inordinately long time periods needed for implementation." (USFWS-W22)
- v. "Alternative 1 could be implemented in less than half the time of the preferred alternative (2), at less cost and more efficiently (better cost/acre ratio)" (USFWS-W23).
- vi. "Common sense tells one that spending \$125,00 per year, basing future purchases on 1994 values will be valid in...55 years... can't be taken seriously." (Cole-W26)
- vii. "The wetlands plan should include the flexibility to not have \$125,000 as a cap for any annual expenditure in Flathead County... At the rate the Flathead is being developed, we have no more than a 10-20 year window of opportunity to protect and enhance wetlands"...[wetlands] "should take priority over administrative funding and wildlife studies". (Illi-W30)
- viii. "Another concern is the expenditure of only \$250,000 annually. With 12.5 million in the bank and at a 5 per cent interest rate, [it] would generate \$625,000 per year" (Worthington-W33)

- ix. 'wetlands are more important than half of the interest from the trust; more mitigation money should be spent on the wetland program' (Cole-H4); 'no one in this room will be alive to see the benefits at the rate we are moving; land values are rising fast and we should act now (Cole-H7).
- x. "Land acquisition by FWP and purchases of conservation easements should be the #1 priority; opportunities are passing us by; a larger percent of the Trust should be spent on this plan now'. (Fairchild-H24)

**b. FWP Response:**

- i. **Funding/Time Constraints:** The Trust Fund was set up to fund all wildlife mitigation programs including upland and riparian/wetland programs. The amount of the Trust Fund was negotiated between the state, BPA, and the northwest utility industry. The Settlement Agreement stipulates that once the Trust Fund is fully funded (December 1994), the Department is free to spend interest and principal through the year 2019 (25 more years) as long as the principal is maintained above \$8 million dollars. After the year 2019, the Department can spend an additional \$4 million of the principal but it must maintain \$4 million in perpetuity to cover operating and maintenance costs of the mitigation projects.

Given the Trust Fund sideboards, we developed various scenarios which assume different amounts of annual funds available, 10 or 25 year implementation time-frames, and fixed costs or no fixed costs. We set the appreciation rate for land values at both 3% and 7% and set the annual interest rate for the Trust Fund interest at 7%. Fixed costs were assumed to be \$2,000/acre fee-title and \$1,000/acre conservation easement. Based on costs for other wetland habitat enhancement programs (J. Herbert pers. comm. 1995; D. Vaughn pers. comm 1995), we found minimum enhancement costs for western Montana to be close to \$1,000/acre. To simplify the scenarios, we dropped enhancement and assumed fee-title and conservation easement costs would equate to \$2,000/mitigation acre based on the credit ratios given in the DEIS of 1:1 for fee title and 2:1 for conservation easement. If enhancement costs are near \$1,000/ac and we need to enhance 3 acres for 1 mitigation acre, we can assume that an enhancement scenario would use up available funds even faster.

Table 2. Comparison of acreage which could be mitigated (% of hydropower objectives) between Alternative One (Status Quo) and Alternatives Two through Four given 4 different spending scenarios with 2 different land appreciation rates (3% and 7%).

Total Acreage and Percent (%) of Hydropower Allocated Objectives Accomplished					
SPENDING SCENARIOS		Land Appreciation Rate			
		3%		7%	
ONE  "ALL IN 10"	Variations	Alt. One	Alts. Two-Four	Alt. One	Alts. Two-Four
	Goal (ac)	8,809	14,564	8,809	14,285
	a. Spend Interest Only <sup>3</sup>	4,169 ac (47%)	4,169 (29%)	3,512 ac (40%)	3,512 (24%)
	b. Spend Principal & Interest	4,399 ac (50%)	4,399 ac (30%)	3,779 ac (43%)	3,779 ac (26%)
TWO  "DO IT BY 2019" (IN 25 YEARS)	a. Spend Interest Only	8,056 ac (91%)	8,056 ac (55%)	5,536 ac (63%)	5,536 ac (38%)
	b. Spend Principal & Interest	8,277 ac (94%)	8,277 ac (57%)	5,899 ac (67%)	5,899 (40%)
THREE  "GET REAL IN 10?"	a. Spend Interest Only	2,084 (24%)	2,084 (14%)	1,756 (20%)	1,756 (12%)
	b. Spend Principal & Interest	2,199 (25%)	2,199 (15%)	1,890 (21%)	1,890 (13)
FOUR  "FLOAT COSTS" <sup>4</sup>	Spend Interest Only	881 ac/yr @ \$993/ac (100%)	1,456 ac/yr @ \$601/ac	881 ac/yr @ \$993/ac (100%)	1,456 ac/yr @ \$601/ac

Scenario 1. "All in 10": 10-year implementation time-frame with all available funds directed to Riparian/Wetland Program.

Scenario 2: "Do it in 25": 25 year implementation time-frame beginning in 1995 with all available funds directed to Riparian/Wetland Program.

Scenario 3: "Get Real in 10?": Only 50% available interest (rest shared with other wildlife mitigation projects) over 10 years.

Scenario 4: "Float Costs": Divide total acreage objective by 10 years. Divide all available annual funds (\$875,000) by annual target to get cost/ac.

<sup>3</sup> Interest on 12.5 million at 7% is \$875,000/year.

<sup>4</sup> Does not incorporate decreasing value of dollar each year; projects will be harder and harder to find.



In Table 2, Scenario One assumes all available Trust Fund interest and/or principal would be spent on the Riparian/Wetland Conservation Program for the next 10 years. Under this Scenario we included 2 variations: a. spend interest only, b. spend all available principal and interests. Scenario Two assumes the same parameters as Scenario One except the implementation time-frame would be 25 years. Scenario Three assumes a more realistic approach of only 50% of the available Trust Fund could be used in the Riparian/Wetland Conservation Program over a 10 year period. The Fourth Scenario assumes a 10 year time-frame, and interest only available to estimate what the cost would have to be per acre to reach the goal. This scenario does not take inflation into account.

The Settlement Agreement precludes the state of Montana from requesting additional funds from BPA. Given these sets of assumptions, the best scenario is to spend principal and interest and implement Alternative One. Scenario 4 indicates that if relatively inexpensive projects (\$601/ac) can be found, 100% mitigation is possible for Alternatives Two-Four.

The results of the most realistic scenario (Scenario 3) indicates insufficient funds exist to achieve hydropower objectives, let alone 100% of the program objectives. FWP believes that the Riparian/Wetland Conservation Program budget can not be developed at the expense of palouse prairie or upland habitat programs. However, these spending scenarios do demonstrate that more mitigation will be accomplished if we can complete projects with low average costs (near \$600/mitigation acre, Table 2) in earlier years.

- ii. **Summary.** The costs of project implementation can impact the FWP ability to meet mitigation objectives. An important consideration in the Riparian/Wetland Conservation Program will be how well we can maximize the value of Trust Fund dollars through leveraging, cost-sharing, donations, and other incentives or means to most fully mitigate habitat losses. Strategies to maximize dollar value must also be used without sacrificing or forgoing program quality, need, or meaningful projects. Although the program will strive for 100% mitigation, we recognize this may not be achievable.

The issue of how much of the Trust Fund will be spent on each of the different wildlife mitigation programs over time is not within the scope of the DEIS. The proportion of the Trust Fund money available to each program will be addressed as other portions of this program begin to go through their 5-year review. For the decision set forth in this FEIS, we are assuming an annual budget of at least \$250,000 to begin implementation of the Riparian/Wetland Conservation Program.



3. How does habitat protection equal mitigation? (G&T-W5; Kaniksu-W36)

a. Specific Comments:

- i. "The Federal Wetlands Protection Act, I understand, is intended to prevent wetlands being destroyed or substantially altered. If that is true, existing wetlands will not be destroyed and acquiring them by MDFWP will not create new wetlands... Acquiring a non-wetland and converting it into a wetland could provide net benefit, but simply acquiring an existing wetland does not confer incremental benefit to the species which might use it." (G&T-W5)
- ii. "Rather than attempt to enhance the protected habitat immediately, the goal...should be to acquire as much habitat—as much ecosystem—as possible and then, at some future time, begin the enhancement of these much larger and more intact... ecosystems where such enhancement proves necessary (Kaniksu-W36).

b. FWP Response:

- i. **Mitigation Goal:** The goal of riparian/wetland mitigation is to replace the wildlife habitat values lost due to hydroelectric power development. Habitat conservation strategies which seek to maintain quality riparian/wetland values are a means of replacing riparian/wetland values lost. Given the degree of human population growth in northwest Montana and the desire for people to live along riparian and wetland areas, there is a very obvious threat to these inherent riparian/wetland values as described below.
- ii. **Threats:** Although under some "protection" by federal laws such as the Clean Water Act, these riparian/wetland habitats can still be easily exempted from review and developed (Montana Audubon Council 1993). Additionally, the extent of legal protection is always subject to change via Congressional action. Riparian/wetland values can also be lost as a result of land management that doesn't give adequate consideration for wildlife values. Even if a wetland itself is not altered directly by an activity, riparian/wetland values are easily destroyed or degraded by humans and their activities on the adjacent uplands. For example, people living near riparian/wetlands tend to increase wildlife disturbances, remove or alter native riparian and upland vegetation, change bank configuration or integrity, increase nutrient loading, introduce noxious weeds, or harbor a host of predators (domestic pets, raccoon, fox, skunks, etc.) Intact natural riparian/wetlands in remote settings which still support large predators such as black bear, grizzly bear, mountain lion etc. are faced not only with these types of threats but also direct conflicts with new residents. Human conflicts with large predators usually result in removal of the depredating wildlife individuals. Over time this removal can have an impact on that

species habitat use of the riparian/wetland and/or on the large predator population.

- iii. **Summary:** Conserving existing wetland riparian areas from further human development or degradation results in a net gain of wetlands or riparian acreage through time because without the conservation action, losses are likely to occur. The net benefit is preventing further loss or degradation of wetland/riparian areas due to human influences.
- 4. **Values of and concerns about habitat enhancement.** (G&T-W4,; Ilii-W27,W28; Worthington-W31, W32; CSKT-W40, W42, W47; Cole-H5; Mitchell-H9; McConkey-H20; Fairchild-H25; Kuhl-H28; Jewell-H35)
  - a. **Specific Comments:**
    - i. "On what basis has it been determined that it takes three acres of habitat enhancement to be equivalent to one acre of habitat protection?" (G&T-W4)
    - ii. "Enhancement on private lands seems kind of uncertain at this stage. The DEIS does not clearly spell out exactly what enhancement means and how long the enhancement project would continue on private land". "All private land enhancement projects should have a minimum enhancement period of 20 years. Investing public money on private land should not be done unless there are long-term guarantees the land will stay enhanced for a long period of time" (Ilii-W27,W28)
    - iii. "I have a major concern when "enhancement" is the major method of a mitigation goal. What is it?... "How long is the enhancement program to go on? Short-term will not do. It should be a long-term benefit for at least 25 years." (W. Worth-W31,W32)
    - iv. "There may also need to be enhancement at some of these [protected] sites. Language needs to be added to include construction and restoration as components of enhancement." (CSKT-W42)
    - v. "... since Alternative 4 [Enhancement Only] does not protect land from subdivision, it would not be as positive for land resources as Alternatives 2 [Preferred] and 3 [Protection Only]." (CSKT-W47)
    - vi. 'projects must be long term (do not want a CRP situation; if enhancement is not long-term, I support alternative # 3 which utilizes fee-title acquisition' (Cole-H5)
    - vii. 'Enhancement projects on private land could turn into private paid hunting and fee access areas'; 'I am not too wild about enhancement projects on private land due to lack of long term benefits; 'developments would hurt enhancement projects (land sold)' (Mitchell-H9)

viii. '3:1 ratio of enhancement versus protection is false'. (McConkey-H20)

ix. 'we need long term benefits from enhancement projects; enhancement is short-term in most cases' (Fairchild-H25)

x. 'you need some guidelines for long-term benefits' (Kuhl-H28)

xi. 'I question the 3:1 ratio' (Jewell-H35a)

**b. FWP Response:**

The issue of what enhancement is and how this tool will be integrated into this program needs to be clarified and expanded. Habitat enhancement is an accepted mitigation strategy. Although FWP has policies and guidelines for upland game bird and waterfowl habitat enhancement programs (duck stamp program), there is no specific policy other than the FEIS guiding the riparian/wetland enhancement activities. For the purpose of this Riparian/Wetland Conservation Program, we have adopted the following definitions and criteria.

- i. **Definition of Habitat Enhancement:** In general, habitat enhancement is defined as the improvement of wildlife habitat through the establishment of food, cover or other habitat requirements or conditions. (Appendix 1, DEIS). To replace the riparian/wetland values lost due to hydroelectric power development (i.e. mitigation), habitat enhancement projects must increase existing riparian/wetland values or restore or re-create a functioning riparian/wetland system from one which is degraded or impacted in other ways.

There are several types of enhancement activities which can increase wildlife values. For example, one activity is the restoration of a degraded or impacted riparian or wetland site to a natural or nearly natural condition through plugging a drainage ditch; another might be adding a fence to reduce grazing impacts to banks or vegetation. Enhancement could also include the use of extensive dike and water control structures to restore/enlarge a drained wetland. Until specific projects are designed and proposed, it is difficult to compare or evaluate the enhancement projects. In general, enhancement activities have the potential to be very positive for riparian/wetland values; but these activities can also be very expensive. They also often require long-term maintenance or management to maintain their habitat values.

- ii. **Crediting Assumptions in DEIS:** For the purpose of estimating habitat enhancement costs and target acreage for each program alternative in the DEIS, we made an assumption based on our best scientific estimate of the relative value of habitat enhancement versus protection. It was assumed that enhancement projects would include both habitat creation and restoration where there would be a net gain in riparian/wetland values. Because some

type of habitat already exists at enhancement sites, it was assumed these existing habitats could be "improved" by at least an average of 1/3; hence it takes 3 acres of enhancement to achieve 1 acre of mitigation. We used available literature on upland projects which indicates we can usually improve habitat by at least 20% but usually not more than 50%. Actual habitat enhancement crediting could be determined at the project level and based on net gain of habitat values. It may be that 1:1 is appropriate if a wetland is restored and it may be 3:1 for a project which simply improves wetland condition.

- iii. **Enhancement Criteria:** Enhancement activities could be independent of land ownership or title encumbrances. However, some guarantees must be in place to insure the long-term integrity of the enhancement sufficient to justify the investment. For the purpose of mitigating for habitat values lost due to hydroelectric power development, and ensuring enhancement projects extend the life of the Trust Fund (55 more years), these projects must be carefully scrutinized, evaluated, and insured against future or neighboring activities which might have an impact on the enhancement project. Additionally, some enhancement activities will require operation and maintenance costs.

Criteria for evaluating enhancement projects will include: a. cost-effectiveness and/or relative cost in comparison to other projects; b. operation and maintenance costs; c. expected duration of achieved benefits; d. potential partnerships; e. value or relationship to existing wetland/riparian ecosystems; f. condition or trend in neighboring wetland/riparian ecosystem; g. effect of adjoining land uses on enhancement activities; h. private versus public lands; and i. in lieu of cost funding for public agencies. The implementation plans for Hungry Horse and Libby will show how these criteria will be used for specific project review.

- iv. **Protection of the Investment:** To replace the habitat values lost due to hydroelectric power development, riparian/wetland enhancement projects on private lands should be accompanied by either an interest in the land (i.e. conservation easement) or a long-term agreement (10-30 years) which has a reasonable chance of extending through the length of the mitigation program (55 more years). In cases where 10-20 year leases are undertaken and not continued, other enhancement or protection projects would be sought to continue to meet the mitigation objectives over the life of the hydroelectric projects.
- v. **Commercial Activities:** Habitat Montana is a program recently adopted by the Fish, Wildlife, and Parks Commission to guide FWP wildlife land protection programs including habitat protection portions of the mitigation program. Under current Habitat Montana guidelines, we cannot undertake any projects which create fee-hunting situations. Commercial activity for

private gain would not be allowed on lands under contract or conservation easement with FWP.

- vi. **Impacts to Land Resources:** Under circumstances where habitat enhancement on private lands is accompanied by conservation easement or long-term agreement, Alternative Four could have a potentially significant positive impact on land resources. However, if habitat enhancement is restricted to federal lands, the benefits to land resources in the long run may be less than what we indicated (Appendix B) because this Alternative would not address development occurring on private lands along wetlands and riparian areas.
5. **Value of conservation easements versus fee-title acquisition versus enhancement and appropriate mix of strategies in each project area.** (G&T-W6; USFWS-W17; Young-W24b; Illi-W27; Worthington-W35b; Kaniksu-W36, W37; CSKT-W40; Mitchell-H10; McConkey-H17, H21; Fairchild-H24; Young-H51)
- a. **Specific Comments:**
- i. "How does this [land policies under Alternative Two] comport with existing policies of the MDFWP, Power Planning Council, and the Wildlife Mitigation Advisory Council with regard to the order of preference for dealing with land issues" (G&T-W6)
  - ii. "Although no distinction was made between the relative biological value of conservation easements versus fee title acquisitions, monetary costs were determined to be \$1,000/acre and \$2,000/acre, respectively. This implies that fee-title acquisition (and subsequent wildlife management) may be twice as valuable biologically as conservation easements". (USFWS-W17).
  - iii. "The priority of mitigation strategies is acceptable, but land purchase should be used if needed to meet the objectives. I support land purchase..." (Young-W24b)
  - iv. "Key wetlands should be under permanent protection through the Department ownership". (Illi-W27)
  - v. "I prefer protection over enhancement. With the purchase in fee title, we can be assured of habitat improvement over the long haul." (Worthington-W35b)
  - vi. "Although your proposed action, Alternative 2, is well intentioned, I believe it will fall short of the long-term benefits to be realized from Alternative 3. "... this protection should be extended to as much habitat as possible..." the goal more properly should be to acquire as much habitat-- as much ecosystem -- as possible..." (Kaniksu-W36)

- vii. "Alternative 3 will contribute more to the long term success of ecosystem management in the project areas. I encourage you to consider Alternative 3 as your preferred alternative". (Kaniksu-W37)
- viii. "We question why habitat enhancement or restoration appears to be less valuable than habitat protection when enhancement and restoration should result in a net gain of wetland habitat compared to protection which, at best, will maintain status quo." (CSKT-W40)
- ix. 'long term projects only on private land such as conservation easements are good but acquisitions are best' (Mitchell-H10)
- x. 'Conservation easements are a good project; short term 5-10 year projects are not acceptable' (McConkey-H17). 'FWP is deviating from old policies with this new plan' (McConkey-H21).
- xi. 'I support alternative 3 (protection only); land acquisition by FWP and purchases of conservation easements should be the # 1 priority; opportunities are passing us by; I do not support alternative # 2 because it limits land acquisition in Lincoln County' (Fairchild-H24)
- xii. I support the preferred alternative (#2)' (Young-H51).

**b. FWP Response:**

- i. **Existing Policies Guiding Mitigation Strategies:** At the time of the DEIS, few formal FWP "policies" existed to prioritize wildlife mitigation strategies. What did exist were the "Mitigation Guidelines" drafted in 1983 by FWP staff to guide development of the first wildlife mitigation plans; but, this policy was never formally adopted by FWP Commission (Appendix D); the general NPPC Acquisition of Wildlife Habitat guidelines (NPPC 1987, p. 133), and various project level criteria used by WMAC and technical subcommittees. The DEIS alternatives were designed to present an array of strategies for public review and input from which policies and decisions could be formally made.

In fall of 1994, the FWP Commission adopted formal rules outlining FWP policy for wildlife habitat protection (Habitat Montana) and drafted the implementation plan. This official policy specifies the preferred use of conservation easements over fee-title purchase in the overall Habitat Montana program. Habitat Montana policies and plans now guide the part of the Riparian/Wetland Conservation Program which involves an interest in land (e.g. conservation easements and fee-title).

Habitat Montana does not address habitat enhancement activities. The FWP upland game bird habitat enhancement program is guided by legislation and resulting FWP rules (see Draft Programmatic Environmental Assessment



for Upland Game Bird Habitat Enhancement Program, FWP, 1994). The duck stamp or waterfowl habitat enhancement program is also guided by legislation and resulting rules.

Therefore, in this FEIS, we established definitions and criteria for riparian/wetland enhancement activities which respond to public concerns (see #4 issue above). The habitat enhancement projects which are funded by the Trust Fund for the Riparian/Wetland Conservation Program will be guided by this FEIS, the Final Decision, and resulting implementation plans. The enhancement guidelines in this FEIS are consistent with past and present FWP habitat related programs. If projects under the Riparian/Wetland Program are combined with other FWP habitat programs, then the other programs' policies, rules and guidelines will apply and be incorporated.

- ii. **WMAC Role:** WMAC has been involved throughout this EIS process by receiving copies of drafts, attending scoping and public hearings, and having opportunities to comment. WMAC will have the opportunity to comment on the FEIS at their fall meeting, October 4-5, 1995. WMAC will provide input into both the Libby and Hungry Horse Riparian/Wetland Implementation Plans.
- iii. **Crediting Assumptions:** The 2:1 crediting for conservation easements compared to fee-title is based on the assumption that lands purchased in fee would be managed 100% for wildlife values whereas lands under a conservation easement would include stipulations that allow most existing land uses to continue. The net gain for wildlife is usually greater with fee-title than with a conservation easement. The 3:1 rationale for enhancement is explained under issue 4.b.ii.
- iv. **Relative Value of each Strategy:** Clearly, there is a diversity of opinion about the feasibility and cost-effectiveness of these 3 general strategies: fee-title, conservation easement, and habitat enhancement. Much of the concern is due to the fact that in the programmatic DEIS, these approaches or strategies were generic. However, all 3 tools plus many others are being successfully used to protect, improve, or mitigate wildlife habitat values by FWP as well as many other agencies and private interests. The success of the program will depend on how well these tools are applied to meet the mitigation goals.

In the DEIS (page 10-11), we proposed various mixes of these tools in the Alternatives based on public concerns with land acquisition, distance from impact area, ecosystem approach, and CSKT issues as well as potential opportunities and cost-effectiveness. Specifically, prioritized strategies under Alternative Two were:

### HUNGRY HORSE

1. Conservation easements (first priority)
2. Purchases of land (if conservation easements are not an option)
3. Enhancement projects on public and private lands with willing and interested cooperators

### LIBBY

1. Enhancement projects on public land (high priority)
2. Enhancement projects on private land with willing and interested cooperators
3. Conservation easements
4. Purchases of land

Since the DEIS was completed, FWP Commission adopted a policy which prioritizes conservation easement over fee-title; this is consistent with the DEIS Alternative Two. This prioritization is a reflection of public concern about government purchasing private lands in Montana, particularly western Montana.

- v. **Annual Goals:** Under each Alternative in the DEIS, we illustrated how many acres might be affected each year by setting annual goals (acres) assuming various percentages of each strategy would be used in the program (e.g. 50% protection and 50% enhancement for Hungry Horse and 90% enhancement and 10% protection for Libby) with an annual budget of \$250,000.

It is important to remember that the selection of a strategy at the project level is a function of landowner desires, project objectives, partnerships, results of negotiations and studies, costs, and many other site-specific factors. It may not be desirable to set out annual goals in a programmatic EIS and discover later that the program is unable to meet these goals. It is conceivable that in any one year, projects using the highest priority strategy simply may not be available. Or, it may be that over time, use of the priority strategy is maximized and other opportunities to use that strategy no longer exist. It is also possible that projects meeting the top strategy are not cost-effective or addressing the most critical habitat needs identified in the implementation plans. The wildlife mitigation program has consistently built in an adaptive management philosophy to enable the program to adapt to changes over time.

It may be more responsive to program needs to maintain the prioritized strategies listed under Alternative Two while excluding the annual goals. This allows for some degree of adaptation to changing conditions and meets the expressed concerns about strategies.



6. Issue of where mitigation should occur and achieving objectives within 15-50 miles of reservoirs. (G&T-W7; USFWS-W18; Young-W24; Levandowski-H23; Illi-W25, W29; Worthington-W34; Windom-H43; McClure-H46; Newton-H48)

a. Specific comments:

- i. "Logic would argue that when you increase the number of acres to be dealt with (enhancement) one may have to increase the distance that would be allowed from the project areas." (G&T -W7)
- ii. "It is unlikely that the enhancement goal of 56,106 acres of wetland/riparian areas exist with such a restrictive boundary" (i.e. 15 air miles under alternative 4). (USFWS-W18)
- iii. "It is important to use all of Lincoln County for consideration of mitigation projects and not limit it to some arbitrary distance from Koocanusa Reservoir or the Kootenai River. I am quite familiar with the riparian/wetland situation on public lands near Koocanusa Reservoir, and there probably is not enough to meet the objectives using only public land". (Young-W24)
- iv. '50 mile radius for projects, people want that linkage' (Levandowski-H23)
- v. "Mitigation for Hungry Horse Dam should be concentrated in the Flathead Valley rather than Lake County. The wetland losses are in Flathead County, not Lake County." (Illi-W29)
- vi. "Flathead County should have a higher priority than Lake County. How did Hungry Horse dam affect Lake County?" (Worthington-W34)
- vii. 'all mitigation funding from Lincoln County should stay here within 15 air miles of the reservoir and no where else in the State' (Windom-H43)
- viii. 'I want mitigation projects implemented within a 15 mile radius of the impact area' (McClure-H46)
- ix. 'projects should be near the impact area' (Newton-H48)

b. FWP Response:

- i. Distance Factors: The 15-mile buffer from the reservoirs was established for Alternative 4 (p. 17, DEIS) in response to public desires during scoping to link the mitigation to the area impacted. Establishing county boundaries for all other Alternatives in the DEIS was also a response to public comments on recouping benefits to local economies. The 50-mile buffer from the reservoirs was an important guideline during development of the

original wildlife mitigation plans (see Montana's previous draft Mitigation Policy, Appendix D).

We agree with the public concerns listed above that the acreage objectives for Alternative Four may not be achievable within some arbitrary distance from the reservoirs (Fig. 2). For example, given the amount of federal land, rough terrain, and general lack of riparian/wetland habitat within 15 miles of Lake Koocanusa, a 15 mile limitation for this extensive a mitigation program may be limiting.

We also have a concern about using county as a boundary within which mitigation would occur. Lincoln County is significantly smaller than Flathead and Lake Counties combined; yet the mitigation goal for Lake Koocanusa is nearly twice that of Hungry Horse. Further, using Lake County as a description lead to confusion over whether it is the county or the Flathead Indian Reservation or both where projects could take place. These concerns plus the need to allow for program adaptations in the future, suggests we outline several prioritized areas to guide riparian/wetland implementation plans.

One possible ecological approach is to use the subbasin of the reservoir. However, both Lake Koocanusa and Hungry Horse drain lands primarily in federal ownership. Even if we expand the area to the entire drainage basin, we find the Flathead basin is significantly larger than Kootenai basin and would not be comparable project areas (Fig. 1). Therefore, it appears we need to tailor the different project area definitions to each hydroelectric project to make them comparable.

We suggest using a 2 or 3-tiered approach with the first definition of project area having more value in comparison to second or third project area descriptions. To reflect distance concerns from Lincoln County, the first level for Libby would be the 15-mile buffer. Recognizing mitigation may not be achievable within this distance and valuable projects may occur outside this area, we suggest the second level comprise a 50-mile buffer (Fig. 2); this area includes all of the Kootenai drainage and portions of the lower Clark Fork River basin. The third level for Libby would be the entire Columbia basin within Montana. This parameter is set by the Settlement Agreement.

For Hungry Horse, we suggest using the entire Flathead basin as the primary project area. This region encompasses the entire Flathead Indian Reservation and is similar in size to Lake and Flathead Counties as described in the DEIS. The second level would include the entire Columbia River basin as set by the Settlement Agreement.

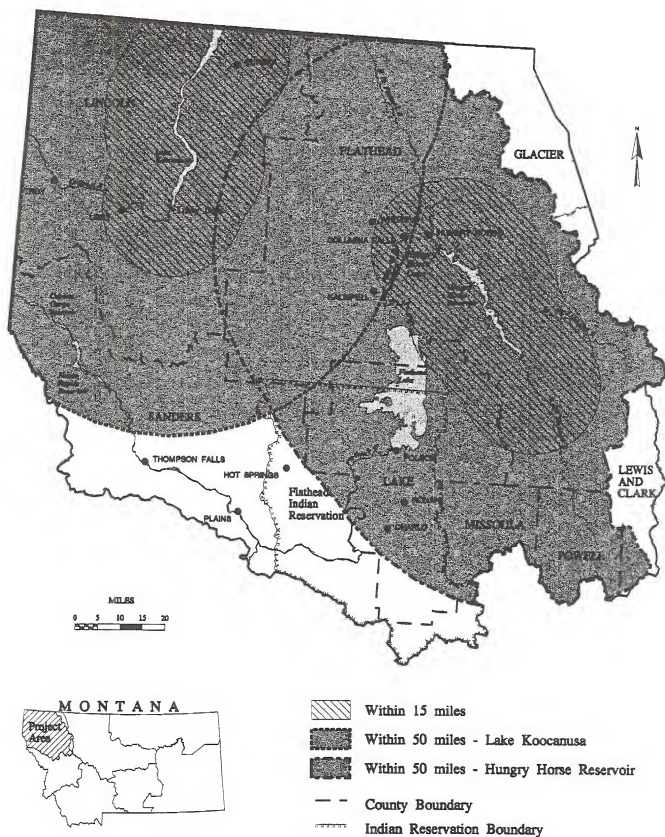


Figure 2. Potential mitigation project area within 15 and 50 miles of Hungry Horse Reservoir and Lake Kootenai and within the Columbia River Basin, Montana.

**7. Need for DEIS. (G&T-W14)**

**a. Specific Comments:**

- i. "not sure if there is enough substance in the decisions the MDFWP is contemplating to warrant an EIS at this time. Each wetland-type project could be evaluated on its own merits to determine the issues involved in land acquisition and in whether to protect or enhance riparian areas. This EIS will not likely shield the MDFWP from dealing with land acquisition issues in the future" (G&T-W14)

**b. FWP Response:**

The Montana Environmental Policy Act (MEPA) requires agencies to conduct a systematic and interdisciplinary environmental review for planning and decision-making for any action which may impact the human environment. (The human environment encompasses the biological, physical, social, economic, cultural, and aesthetic factors that interrelate to form the environment) (MEPA Model Rules II (12)). An impact may be adverse, beneficial, or both (MEPA Model Rule IV (2)). Considering the nature and extent of the Riparian/Wetland Conservation Program, the potential effects easily fall within the "may effect" criteria. FWP believes the MEPA process encourages better and more responsible decision-making on the part of agencies. This process provides the interested public the opportunity to participate in the decision.

The programmatic EIS process does not relieve FWP from reviewing the environmental effects of each habitat protection project. It allows for a broader evaluation of Program level effects not easily identifiable with individual projects. During project implementation, each project will need to go through an environmental review process to identify potential impacts. If significant impacts are found, they will need to be disclosed via an EA or EIS process. The impact discussions can refer or tier from this Programmatic EIS to reduce duplication. An example of an environmental review checklist designed to reveal potential impacts is attached (Appendix E).

**8. Cumulative effects; impacts of other land protection programs on the environment. (G&T-W1; Worthington-W35a; Jewell-H36)**

**a. Specific Comments:**

- i. "Cumulative impacts...by all of these [e.g. federal agencies] need to be examined in order to determine whether the proposed actions by [FWP] are appropriate in that context"... "The public needs to know how wetlands are now being dealt with by all parties, and the need for additional action by the State. It is suggested you carefully review guidelines for preparing a programmatic EIS and revise the document accordingly." (G&T-W1)

- ii. "Can the mitigation money be combined with say, 526 funds, to come up with payment for some really ideal and excellent projects?" (Worthington-W35a).
- iii. 'I think that there are secondary and cumulative impacts' (Jewell-H36)

**b. FWP Response:**

Under MEPA (Model Rules II (7)) cumulative impact "means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures."

MEPA (Model Rules V 3d and 3e) requires an evaluation of the "impacts, including cumulative and secondary impacts, on the physical environment"...and "...on the human population in the area to be affected by the proposed action".

In essence, FWP must consider the cumulative impacts that other habitat protection programs have had in the past and those in which we or another state agency are likely to be participate in the future. The following are the potential programs which might cause cumulative effects and our responses:

- i. **Kerr Mitigation:** Although FWP has been part of the mitigation planning and EIS review for the Federal Regulatory Agency's (FERC) relicensing of Kerr Dam, we are not part of the decision-making process. At present, the mitigation plan is going through its own EIS process. The Kerr mitigation program may call for fee-title or conservation easements on riparian or wetlands within the Flathead Valley as well as enhancements on existing wetlands. If both Kerr and Hungry Horse mitigation programs focus within the Flathead valley north of Flathead Lake, there may be cumulative effects both on the physical and social-economic environments. The environmental effects would include maintenance or improvements in wildlife habitat quality, water and air quality, habitats for threatened and endangered species, and biodiversity. The social-economic effects may be the long-term preclusion of development rights around wetland and riparian areas. The combined effects of Hungry Horse and Kerr may affect 3,000 to 5,000 acres under conservation easement or fee-title within the Flathead Valley both north and south of Flathead Lake.
- ii. **Habitat Montana (HB 526 funds):** The FWP Commission makes the final decisions regarding land issues for Habitat Montana, a program which outlines agency review and approval processes for all Department wildlife habitat conservation efforts including the BPA Wildlife Mitigation Trust fund. Habitat Montana also includes projects derived from ear-marked

general hunting license dollars (HB 526 program) and moose, sheep, and goat auction funds. The HB 526 funds provide approximately \$2 to \$2.5 million each year to protect wildlife habitat; some of these funds are likely to protect additional wildlife habitat in northwest Montana and could be used in combination with BPA Trust funds.

- iii. **Highway Mitigation:** For wetlands impacted by state highway projects, the Montana Department of Highways usually looks for projects adjacent to or near the areas impacted. For the highway 35 expansion in the Flathead Valley, 3 acres of wetlands will still require mitigation in the future. Another 6-10 acres will be impacted by Highway 93 expansion between Somers and Whitefish (Shelley, pers. comm. 1995). The Highway Department uses mitigation banking which is the establishing wetland credits through enhancement or protection projects as a tool to address the cumulative impacts of highway construction. When suitable mitigation projects to replace the expected 9-13 acres of impacted wetland are developed, the Highway Department will then contribute the necessary funds to complete the mitigation projects. The highway mitigation projects may be undertaken in conjunction with Kerr or Hungry Horse Riparian/Wetland Conservation programs or they may be independent. In either case, there may be an additional cumulative impact of the Highway wetland mitigation program; the impacts would be similar to those described for the Kerr mitigation program in i. above.
  - iv. **Cumulative Effect:** The above programs could be used in combination with the Riparian/Wetland Conservation Program and cumulatively impact land use in the affected counties. This impact was described as being greatest for Alternative Three (protection only) in the DEIS (page 57, paragraph 4) because of the increased number of acres affected. All effects of the Riparian/Wetland Conservation Program both adverse and beneficial will be additive to the effects of these other programs.
9. **Insufficient discussion of Confederated Salish and Kootenai Tribes (CSKT) participation in previous mitigation planning; no clear justification for program participation; concern with future process (e.g. cultural concerns, project identification, implementation, cost-sharing (CSKT-W37, W38, W39, W41, W46, W48; Mitchell-H8)**
- a. **Specific comments:**
    - i. "In reference to this map (map of northwest Montana), we request that the map of the Flathead Indian Reservation also be added to the current map". (CSKT-W37)
    - ii. "no specific mention of review and participation in project planning efforts by Indian tribes, which is an integral component of Columbia river hydroelectric mitigation procedures. (CSKT-W38)



- iii. "it should be noted that the Tribes wish to consult on proposed projects outside of the boundaries of the Flathead Indian Reservation due to the Tribes' reserved rights under the Treaty of Hellgate for the use of usual and accustomed areas in aboriginal territory and due to the potential for disruption of cultural sites." (CSKT-W39)
- iv. "...we wish to inquire what the Department views as the practical definition of the term "lead agency"...who would hold title to acquired mitigation lands and ...oversee easements? ...To implement the relationship between the Tribes and the Department anticipated, a Memorandum of Agreement will probably be required (CSKT-W41).
- v. "...discussion needs to include the need to actively involve the Tribes' Kootenai and Salish Culture Committees in reviews of any plans that involve cultural sites, both on an off the Reservation." (CSKT-W46)
- vi. "On pages 54 through 68, the document [DEIS] analyzes impacts of wetland mitigation projects in the various counties. We find it disturbing that no similar analysis is developed for the Reservation." (CSKT-W48)
- vii. 'defer to CSKT as lead agency on their lands' (Mitchell-H8)

**b. FWP Response:**

- i. **CSKT Participation in Mitigation Planning:** Both Libby and Hungry Horse hydroelectric projects significantly impacted aboriginal hunting and religious grounds for the CSKT. Due to that fact, The DEIS should have included a clearer description of CSKT role in developing the wildlife mitigation program for the 2 hydroelectric projects. We revised the project area map to include the exterior boundaries of the Flathead Indian Reservation (Fig. 1).

During the 1980's, the CSKT staff joined other agencies and public interests in estimating habitat losses and designing the wildlife mitigation projects. Once the plans were incorporated into the NPPC's fish and wildlife program, FWP then entered into negotiations directly with BPA to set up the Trust Fund; the CSKT did not enter into a separate negotiation with the understanding our program would continue to reflect CSKT interests. The CSKT comments make it clear they want to continue to actively participate in the implementation phase of the Riparian/Wetland Conservation Program. We fully anticipate their continued participation as members of WMAC and the Riparian/Wetland Conservation Committee which both provide input on program direction and review of individual projects.

The CSKT have recognized that riparian/wetland conservation projects which help conserve the wildlife habitat base in northwest Montana, particularly those projects which benefit culturally important wildlife species, are desirable. In addition, the tribes have indicated that projects within the Swan valley and on the Flathead Indian Reservation which increase or help to maintain the value of remaining linkage or travel corridors between the Swan Mountains and Mission Mountains will also benefit wildlife populations within the Flathead Indian Reservation and adjoining lands. These interests will be incorporated into the implementation planning process as project areas, criteria, and strategies are prioritized.

- ii. **Lead Agency Agreement:** FWP considers the CSKT as the lead agency for identifying, developing, proposing, and implementing riparian and wetland conservation projects within the exterior boundaries of the Flathead Indian Reservation. Questions about ultimate ownership of title or conservation easement is not resolved at this time. These issues could be achieved via a formal agreement such as a Memorandum of Understanding.
  - iii. **CSKT Cultural Concerns:** FWP environmental review process will include both cultural and historical site reviews by the CSKT culture committees for projects both on and off the Reservation. Their participation at both the individual project level and overall program direction should provide for their opportunity to review all mitigation actions as CSKT deems appropriate.
10. **Socio-economic impact analyses of Alternatives.** (G&T-W13,W15; CSKT-W48; Mitchell-H11; McConkey-H19; Jewell-H34; Windom-H41, H42; McClure-H47; Truman-H52)
- a. **Specific Comments.**
    - i. "Management agencies such as the MDFWP... must look ahead and anticipate the highest and best use for lands. In the case of privately-owned riparian areas in western Montana, they are extremely desirable for attractive homesites. Any actions by MDFWP to prohibit construction of such homes in riparian areas will definitely affect the tax future of the affected counties. " (G&T-W13)
    - ii. "One activity which could find acceptance with Lincoln County residents is to exchange land rather than outright purchase." (G&T-W15)
    - iii. "There seems to be a need to also evaluate the effects of habitat preservation on the quality of life of each area. Current economic analyses seem to indicate that quality of life factors are often as important as economic factors" (CSKT-W48)



- iv. 'PILT (payment in lieu of taxes) is for real property taxes only; real property taxes are only a small part of private farm expenditures (machinery, inventory, income taxes); FWP does not consider the above in a socioeconomic analysis' (McConkey-H19)
- v. 'alternative # 4 (enhancement only) potentially affects 55 sections of land in Lincoln County so their would be an economic impact' (Jewell-H34)
- vi. 'PILT is not sufficient (does not look at potential for future development of that land' (Windom-H42)
- vii. 'I support alternative # 2; alternative # 2 does not have any negative economic impacts on northwest Montana (Mitchell-H11)
- viii. 'support alternative # 4; no private land acquisition from a rapidly eroding tax base in Lincoln County' (Windom-H41)
- ix. 'do not take any more property out of the tax rolls in Lincoln County; enhance land in public ownership or already in control of the state' (McClure-H47)
- x. 'land acquisition will result in the taxable value of the land decreasing' (Truman-H52)

**b. FWP Response:**

- i. **Fee-title:** We acknowledge that use of fee-title purchase could result in greater impacts to land uses and existing or future tax base because it may alter existing land use on that property. On page 64 and 67 in the DEIS, we stated: "Due to the lack of future improvements on acquired lands, property taxes may be reduced slightly on some wetland and riparian habitat mitigation projects". However, for fee acquisitions, the Department would pay in lieu of tax payments (PILT) which partially offsets lost tax revenues.
- ii. **Conservation Easements:** Because conservation easements keep land in private ownership and usually maintain current land uses, use of this tool often helps to maintain current tax base. Use of conservation easements could, however, preclude future tax income to local communities depending on future land use changes.
- iii. **Enhancement Activities:** Enhancement activities on public land should have no significant impact on existing land uses or tax base. Enhancement activities on private lands when accompanied by conservation easements will result in impacts described above under conservation easements. When accompanied by a lease or agreement, the impacts of enhancement projects could be similar to the conservation easement but only for the lease

duration. Direct expenditures for enhancement activities should also have a positive economic effect.

- iv. **Land Exchanges:** If Riparian/Wetland Conservation projects entail land exchanges which do not affect net amount of private or public land within a county, then the community impacts might be negligible. This is a viable strategy which may maintain current private land base, be responsive to social-economic impact issues. We have included land exchanges as a strategy in the Preferred Alternative (Section IV).
- v. **Comparison of Alternatives and Community Impacts:** The impact to existing land use and tax base would be greatest under the Protection Only Alternative (Alternative Three) and Alternative One (Status Quo) both of which use fee-title within the protection strategy. Alternative One would only impact Flathead and Lake Counties and not Lincoln County. The impacts under Alternative Four, enhancement on both public and private lands, will be proportional to the amount and nature of the land which is enhanced but accompanied by a conservation easement. In general, the impacts of Alternative Four to land uses and taxes will be the least.

The impact of Alternative Two in the Hungry Horse project would be intermediate between Alternative Three (Protection Only) or One (Status Quo) and Alternative Four (Enhancement Only) because it proposes to use an even mix of protection and enhancement tools. For the Libby, project area, the impacts of Alternative Two to local land use and tax base would be closer to Alternative Four because Alternative Two proposes 90% enhancement and mostly on public lands.

In general, the benefits of conserving the integrity of riparian/wetland habitat can outweigh the land use and local tax impacts, particularly where the local tax and land use impacts are minimized. Some of the benefits include maintenance of the existing quality of life for residents, maintenance of community income generated from amenity-related recreation such as floating, hunting, fishing, wildlife viewing, aesthetics; benefits to the community of clean water and clean air; and possibly benefits of lower tax rates, particularly where population pressures tend to increase property taxes (American Farmland Trust 1992 and 1993).

vi. **Community Impacts of Preferred Alternative:** The Preferred Alternative could have the same or slightly greater negative impact on local land uses and tax base in Lincoln County than the original proposed Alternative Two. The Preferred Alternative prioritizes all strategies similarly to Alternative Two with habitat enhancement first. However, we do expect that under the Preferred Alternative enhancement on public lands would be less than 90% therefore increasing the percentage of projects on private lands.

The land use and tax base impacts for Flathead County would probably be the same as described in the DEIS Alternative Two because of the similarity in strategies and priorities.

All proposed projects whether a simple enhancement or land purchase must go through the Environmental Assessment process during which the socioeconomic impacts are disclosed and evaluated. All potentially affected parties are encouraged to provide information and concerns during this decision-making process.



## SECTION III

### SUMMARY OF MAJOR CONCLUSIONS

#### A. PHYSICAL AND BIOLOGICAL EFFECTS OF ALTERNATIVES

##### 1. Direct Effects:

All of the considered alternatives would result in a positive direct benefit to the physical and biological environment through the long-term conservation of wetland/riparian habitat values at specific project areas. Such values of riparian/wetlands include maintaining air quality, water quality, healthy riparian/wetland vegetation, fish and wildlife resources, biodiversity, threatened and endangered species habitat, and functional riparian/wetland ecosystems (Appendix B). The expected benefits may be greater for Alternatives One, Two, and Three than Alternative Four if Alternative Four were to focus on enhancement on public lands and not address resources on private lands.

##### 2. Secondary and Cumulative Effects:

In the DEIS, we assumed the alternatives would have no effect on air quality; in retrospect, we believe there may be a net cumulative positive effect on air quality where conservation strategies preclude subdivision or other developments. This was not an issue raised by the public. In addition, the cumulative impacts of all the alternatives (except Alternative One in Lincoln County) to the physical and biological environment would be significantly positive. The cumulative impact on biodiversity and threatened and endangered species habitat would be more positive if currently rare habitats are considered during implementation. Appendix B contains summary table of physical and biological impacts described in the DEIS.

#### B. SOCIAL-ECONOMIC EFFECTS

##### 1. Direct Effects:

All alternatives including the modified proposed Alternative 2 would have both positive and negative effects on the social environment of the region where implementation occurs (Summary Table, Appendix B). Because Alternative One does not include Lincoln County, this alternative would not generate any social or economic benefit or impact to this area.

- a. **Positive Effects:** Positive economic benefits from Alternatives Two (including Modified Two), Three and Four would include an increase or maintenance of outdoor recreation or amenity based economies such as wildlife viewing, tourism, science education, or hunting; maintenance of existing land uses and open space; aesthetics; assistance in maintaining water and air quality; provision of incentives that help counties and local communities direct development to less

sensitive areas; and maintenance of local property tax rates which might otherwise increase to provide community services to rural communities experiencing population growth.

In light of the rapid rate of subdivision and development which is occurring in northwest Montana, Alternatives One, Two, and Three would increase aesthetic and recreation values within the local communities because a portion of the riparian/wetland habitat base would be conserved through conservation easements, fee-title purchase, or long-term leases (enhancement). Alternative Four, enhancement only, would use enhancement on public land over enhancement activities on private land. Therefore, Alternative 4 would result in fewer expected benefits to the overall community because this option ignores ongoing development along private riparian/wetlands. Where Alternative Four includes a long-term lease or conservation easement on private land, the community will see the economic and social benefit described above.

Potential long-term benefits to private landowners within or adjacent to riparian/wetland conservation projects include a possible increase in land values by owning land adjacent to perpetual open space and wildlife habitat; possible inheritance and income tax benefits for rural agricultural or timber landowners; financial compensation to landowners who decide to sell development rights or restore/enhance riparian/wetland values, thus precluding the potential for lost land value through zoning or other government regulations that could limit development. These types of benefits were not included in the DEIS and will also occur under the modified Alternative Two.

- b. **Negative Effects:** Negative effects could occur to land use and the tax base, the degree depends on the Alternative. We acknowledge that the use of conservation easements under Alternatives Two and Three may preclude the future development of some lands to their "highest and best use" and that this may preclude future tax revenues (DEIS pg 64). Under the modified Alternative Two, conservation easements may be used more than under the original Alternative Two and may result in slightly greater potential negative impacts to future land uses and tax bases.

Some members of the public felt quality-of-life issues were equally important as other social-economic issues such as tax base or land use. We believe these values will be enhanced by those alternatives which help to maintain existing land uses and values without changing actual land ownership patterns through the use of conservation easements (Alternatives Two, modified Two, and Three).

## **2. Secondary and Cumulative Effects:**

Under Alternative One (Status Quo) and Three (Protection Only), the use of conservation easements and fee-title acquisitions would potentially have the greatest

cumulative negative impact on local land uses and tax base (Appendix B). The impacts of Alternative Two and the Preferred Alternative would be somewhat less.

The cumulative effects of any alternative of the Riparian/Wetland Conservation Program on local communities, land use, and taxes would be additive to other mitigation or habitat protection programs occurring within the same area (i.e. Kerr mitigation, Highway mitigation etc.).

### **C. OTHER SUBSTANTIVE ISSUES RAISED BY THE PUBLIC**

#### **1. Scope of the DEIS Decisions:**

The scope of the decisions to be made through the programmatic EIS process was not as clearly stated as it should have been in the DEIS. The riparian/wetland conservation Program is an extension and modification of existing programs already authorized under by the NPPC. The strategy to achieve riparian/wetland mitigation is the chief substantive issue addressed by the alternatives in the DEIS. Other substantive issues include modifications in the total mitigation objectives (acreage), and the definition of project areas.

- a. **Riparian/Wetland Conservation Strategies:** The primary substantive issue which is being decided through this EIS process is the approach or the method of habitat conservation to be emphasized by this program. Considered alternatives included fee-title, conservation easements and enhancement projects.
- b. **Mitigation Objectives (Acres):** Another proposed change in the existing wildlife mitigation program is to use mitigation objectives based on riparian/wetland habitats lost at the 2 hydroelectric projects (Table 1) rather than acres based on target species acres (i.e. waterfowl, black bear/grizzly bear). That change has resulted in an increase in overall acreage to be mitigated by 5,755-7,283 acres (hydropower allocated to 100% mitigation) as well as a redistribution of these objectives back to the reservoirs project areas. (Note: the upland habitats within the black bear/grizzly bear program have been excluded from Alternatives Two - Four and are part of an ongoing program). Under all Alternatives excluding Status Quo, Libby mitigation objectives will take place closer to Libby dam and not in the Flathead valley.
- c. **Hydropower Allocation and Mitigation Objectives:** Public comments on both the scope of decisions to be made and program achievability (see below) raised the issue of the hydropower allocation of the responsibility to pay for mitigation. The Trust Fund was set up fund mitigation for that portion of the impacts attributable to the hydroelectric power interests (which did not include irrigation and flood control). The NPPC and BPA arrived at the conclusion that hydroelectric power interests are responsible for 76% of Hungry Horse and 79% of Libby dam's wildlife impacts. The objectives used for riparian/wetland conservation in the DEIS represent 100% of the losses rather than a hydropower allocated proportion. Although we maintain the goal of mitigating 100% of the

losses, we recognize the Trust Fund is not set up for that purpose and may not be sufficient to do so.

- d. **Mitigation Project Areas/Distance Factors:** This issue was a concern during development of the DEIS and was a substantive issue raised by DEIS comments. Using a distance or identifying counties within which riparian/wetland mitigation must occur would result in lopsided project areas for the 2 hydroelectric projects. Further, this approach does not address the need to set some guidelines which will meet the mitigation goals but be not too restrictive during implementation. In response to these concerns, we propose to define 3 prioritized project areas or levels for Libby dam and 2 project areas for Hungry Horse. The reasons for the differences in definitions of each level between the 2 hydroelectric projects is to make the area at each level more similar between hydroelectric projects and to respond to public concerns.

For Hungry Horse, project area levels would be defined as within: 1. Flathead River drainage area; 2. Columbia River basin, Montana. For Libby the priority areas would be within: 1. 15 miles of Lake Koocanusa; 2. 50 miles of Lake Koocanusa (includes all Kootenai River drainage plus portions of Clark Fork River; 3. Columbia River basin, Montana.

## 2. Program Achievability, Budget, and Time-Frame

The analysis we completed on these issues (Table 2) shows that the existing funding structure may not be sufficient to achieve Alternatives Two-Four program objectives; the best scenario was to spend all available principal and interest on Alternative One over 25 years (with 3% land interest rates) to achieve 94% of the objectives. These same funds would achieve 57% of objectives for Alternatives Two-Four. Therefore, this program may need to leverage available funds, undertake joint projects, cost-share to the fullest extent possible without sacrificing quality projects, and look for other creative means to extend the available funds to reach habitat objectives. We recognize that 100% mitigation may not be achievable.

The decision on how much Trust Fund money should be spent on the Riparian/Wetland Conservation Program or other wildlife mitigation programs was not within the scope of the EIS process. The Department will address this issue during the next 5 year wildlife mitigation program evaluation process (beginning in 1996). The DEIS assumed the annual budget to be approximately \$250,000/year. The assumption is that at least this amount will be available to implement the Riparian/Wetland Conservation Program until any more program level evaluations take place.

## 3. Concerns Related to Strategies

- a. **Priority Strategies/Mix of Strategies:** The DEIS discusses 3 major strategies to replace habitat values lost due to hydroelectric power development: fee-title purchase, conservation easements, and enhancement activities. Land exchange



was not a tool specifically mentioned in the DEIS but is another strategy which could be used to maintain current private land base while benefitting riparian/wetlands. It could be viewed as a variation of the fee-title strategy as it redistributes land ownership patterns.

We also recognize that the annual goals used in the DEIS to show how the program may be implemented could be constraining during program implementation. To provide adaptability in this program over time and because projects are dependent on many external factors, we suggest maintaining the priority ranking similar to that proposed in the DEIS and listed in the Preferred Alternative (Section IV).

The strategies outlined in the Preferred Alternative are similar to those proposed under Alternative Two. In response to cost, time-frame, and protection versus enhancement issues, we have expanded and clarified these strategies under the Preferred Alternative. For example, we put fee-title acquisition as a low priority for Libby but suggested a higher priority for fee-title acquisitions from willing landowners with the goal of placing a conservation easement on the property and then returning that property to the private market.

Another way to implement a conservation easement might be to provide incentives to landowners through loans or administrative support to donors. These tools can be used in combination with private land trusts to further expand strategies. The Preferred Alternative allows for development of this flexibility.

- b. **Fee-title:** Because northwest Montana has a large federal and state land base in comparison to private land, there is a major public sentiment against government purchase of private land to achieve mitigation. This sentiment was clearly reflected in the public comment, particularly in Lincoln County. Additionally, the adopted policy of Habitat Montana reflects this concern and has put other tools such as conservation easements above fee-title. However, fee-title may be the only option available. Other versions for fee-title include bargain sales and donations. Fee-title transfer to a conservation program may be the only acceptable choice for some landowners. Under bargain sales or donation projects, fee-title transfer is clean and cost-effective. The land could be returned to private market after placement of a conservation easement on that property. Fee-title acquisition may be a desirable strategy when other values such as recreation, access, viewing, or open space are driving forces. In this situation, the project could be cost-shared with other partners.

For these reasons, we conclude that fee-title acquisitions (not necessarily purchases) will be an available option for in the Riparian/Wetland Conservation Program at both project areas. However, fee-title purchases would be the lowest priority for Libby. Fee-title acquisitions could be considered a higher priority at Libby if the purpose is to temporarily hold a property with significant habitat values until a conservation easement can be placed on that land; the land would

then be traded back to the private sector or sold in exchange for conservation easements on other riparian/wetland habitats.

- c. **Conservation Easements:** The conservation easement is a very useful tool which can be customized for each landowner, keeps land in private ownership, maintains current land uses and tax base, and usually has more public support. Conservation easements can be donated, cost-shared or purchased. There is a network of agencies and non-profit organizations using this tool extensively, primarily through donations, who could be potential partners or assist us in our use of this tool. Conservation easements are a tool which can help a community or neighborhood implement its own land use plan. Disadvantages of the conservation easement include relatively high up-front administrative costs, the potential for community impacts (e.g. loss of future taxes derived from future "highest and best" use); annual monitoring costs; and potential violation costs. There may be some risk to definition of perpetuity by the courts.

Because the public concern about eroding private land base and potential social impacts of fee-title acquisition, conservation easements will continue to be a higher priority strategy than fee-title for both project areas. Because the tool can be used to complement planning efforts at the neighborhood level, we would coordinate our activities with local or county planning organizations to cooperate in their land use planning efforts for protection of riparian/wetlands as they so desire.

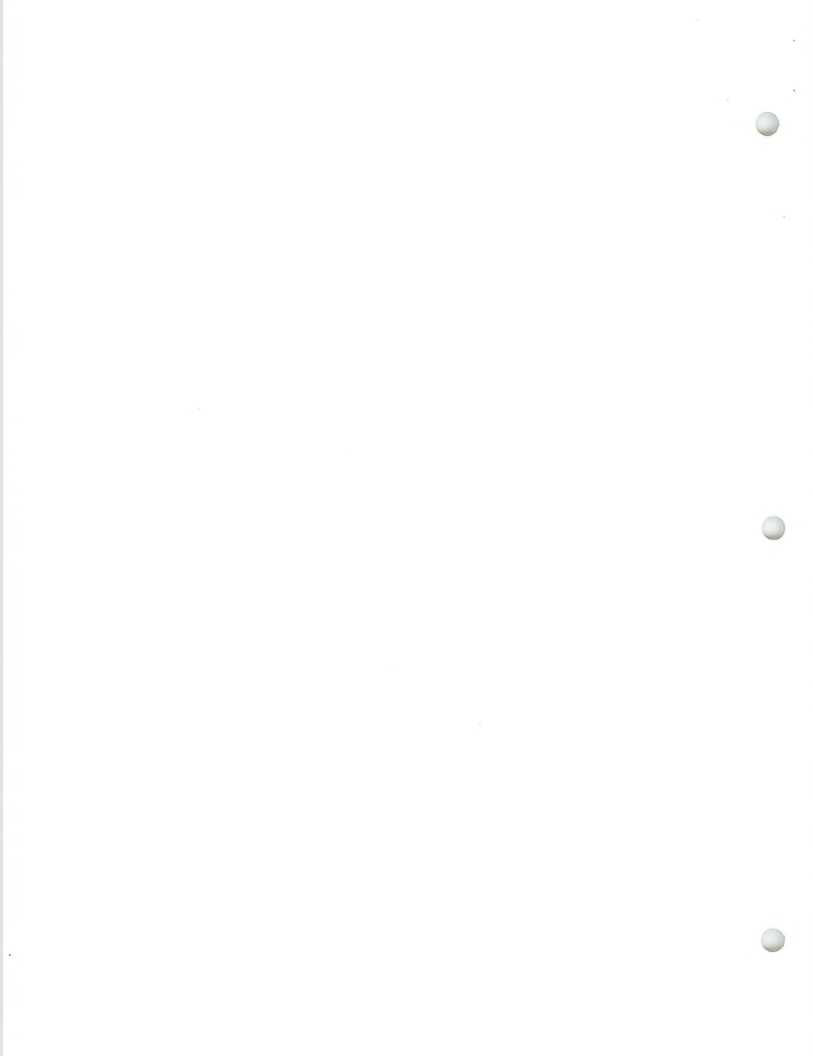
- d. **Enhancement Activities:** Enhancement activities can occur on private or public lands; can cover a variety of habitat manipulations ranging from inexpensive fences to expensive dikes and water control structures; they may require no maintenance or require a high level of operation and maintenance cost; they can also be managed by lease, easement, or by another organization. Because of the wide range of enhancement activity types, FWP believes we should consider this strategy as a high priority if these projects meet certain criteria. Based on issues raised to the DEIS, we recommend the following general criteria which can be expanded upon in the implementation plans.
- i. **Cost-effectiveness:** This includes planning, implementation, and operation and maintenance costs; the potential for cost-sharing with partners; and the amount of mitigation which would be achieved.
  - ii. **In lieu of Funding:** Consistent with the NPPC's guidelines for mitigation, projects funded by the Trust Fund must be in addition to existing or mandated expenditures of federal or state agencies. Thus, all enhancement projects on public lands must be considered beyond existing activities or responsibilities of these agencies.
  - iii. **Duration of Expected Benefits:** An enhancement project on private or possibly state school trust lands should be accompanied by an interest in the land (i.e. conservation easement) or by relatively long-term lease (10-30

years) with a good chance or incentive for renewal. For federal lands, the expected duration would be the same as for the Trust Fund. Mitigation benefits would be pro-rated according the length of the protection agreement.

- iv. **Ecological Considerations:** These criteria include project size, location with respect to other protected riparian/wetland habitats or other mitigation projects; habitat types created and/or affected; rare plants or communities; activities on surrounding lands (i.e. subdivision).
- e. **Land Exchanges:** This strategy is essentially a type of fee-title strategy which can be used with 2 or more landowners as a means to protect or enhance riparian/wetlands. The land exchange could result in the same amount of public and private land; the exchange simply modifies the pattern. Large land exchanges often take years to implement; planning costs are relatively high. However, many landowners are interested in trading out of wetland/riparian lands as a means to acquire timber, agricultural, or recreational lands somewhere else. This is a tool that needs to be included because it has the potential to meet private landowner, community, and well as the Riparian/Wetland Conservation Program needs.

#### 4. **Confederated Salish and Kootenai Tribal Issues**

The potential project areas consisting of tiered levels for both Hungry Horse and Libby include all of the aboriginal hunting grounds of the CSKT in Montana as well as the entire Flathead Indian Reservation (most of which is within the Flathead River drainage). The state will meet with the tribal government to clarify the definition of lead agency and ultimate ownership and responsibilities for riparian/wetland conservation projects within the exterior boundaries of the Flathead Indian Reservation; to determine how the state and tribes will coordinate program and project activities and how we will address cultural and other concerns during implementation. Some type of agreement may be necessary to outline policies and procedures.



## **SECTION IV**

### **PREFERRED ALTERNATIVE**

This Preferred Alternative is modified from the DEIS Alternative Two by restating habitat goals and objectives, clarifying potential project areas, and modifying the priority strategies for both Hungry Horse and Libby. Because of differences in objectives and strategies between Hungry Horse and Libby, we separated the Alternative into 2 project areas.

#### **HUNGRY HORSE HYDROELECTRIC PROJECT**

##### **A. GOAL**

**TO FULLY REPLACE THE RIPARIAN AND WETLAND HABITAT VALUES LOST AT HUNGRY HORSE HYDROELECTRIC PROJECT BY:**

1. Conserving significant intact riparian and wetland communities which best represent those habitat values lost and/or,
2. Conserving significant rare, unique, or productive riparian or wetland communities which might otherwise be lost from the ecosystem.

##### **B. OBJECTIVES**

Conserve 5,303 (hydropower allocated) to 6,978 (100% goal) acres of riparian/wetland habitat within: 15 miles of Hungry Horse Reservoir or within the Flathead River basin, or within the Columbia River basin, Montana.

##### **C. PRIORITIZED STRATEGIES**

The following strategies are proposed in priority order as a guideline for developing the implementation plans for Hungry Horse. During actual implementation, the type and nature of projects is dependent on what is available at a certain time and place.

1. Conservation easement acquisition through donation, cost-share, partial purchase, or outright purchase with willing landowners.
2. Fee-title purchase with placement of conservation easement and return to private sector if a conservation easement is not an option.
3. Fee-title acquisitions from willing landowners through bargain sale, donation, partnerships, direct purchase.

4. Long-term riparian/wetland habitat enhancement activities on private, corporate, county, or state lands or on federal lands (i.e. U.S. Fish and Wildlife Service or Forest Service) which is clearly over and above their current budget and management responsibility.
5. Land exchanges with federal, state, corporate entities which result in protection or enhancement of riparian/wetlands.

#### **D. RATIONALE**

The public has clearly stated that to mitigate for Hungry Horse, habitat protection strategies are preferable over habitat enhancement. This is due in part to increasing human population and the subdivision of lands adjacent to riparian/wetland areas in the Flathead. The priority strategy, conservation easement acquisition, is consistent with existing FWP policies guiding habitat protection and the priorities listed under Alternative Two. It is an approach which can be used to meet public concerns about loss of private land base and program needs. The second priority, fee-title with return to private sector, is a means to acquire a conservation easement on a property which is for sale. The third priority, fee-title acquisition, is retained to meet public desire for protection of other values in addition to habitat. This strategy would be used if conservation easements were not an option. To purchase property using this program, high values along with partnerships or below-cost factors must be present. The fourth priority, habitat enhancement can often be used in conjunction with the other strategies. Large enhancement projects often require a land interest because they may affect existing land uses. Small enhancement projects may be a means to improve habitat and build relationships with landowners. Enhancement would be pursued as a complement to other strategies. Because of the complexity with land exchanges, this strategy was placed last. However, it may be an important option in some circumstances.

#### **E. PROJECT AREA DEFINITION**

The primary project area is the entire Flathead River drainage basin. The second level is the Columbia basin of Montana as established by the Settlement Agreement.

## **LIBBY HYDROELECTRIC PROJECT**

### **A. GOAL**

**TO FULLY REPLACE THE RIPARIAN AND WETLAND HABITAT VALUES LOST AT HUNGRY HORSE HYDROELECTRIC PROJECT BY:**

1. Conserving significant intact riparian and wetland communities which best represent those habitat values lost and/or,
2. Conserving significant rare, unique, or productive riparian or wetland communities which might otherwise be lost from the ecosystem.

### **B. OBJECTIVES**

Conserve 9,261 (hydropower allocated) to 11,724 (100% goal) acres of riparian/wetland habitat within: 1. 15 miles of Lake Koocanusa; 2. 50 miles of Lake Koocanusa; 3. Columbia River basin, Montana.

### **C. PRIORITIZED STRATEGIES**

1. Long-term riparian/wetland habitat enhancement activities on private, corporate, county, or state lands or on federal lands (i.e. U.S. Fish and Wildlife Service or Forest Service) which is clearly over and above their current budget and management responsibility
2. Conservation easement acquisition through donation, cost-share, partial purchase, or outright purchase with willing landowners
3. Fee-title purchase with placement of conservation easement and return to private sector when conservation easements are not an option.
4. Land exchanges with federal, state, corporate entities which result in protection or enhancement of riparian/wetlands.
5. Fee-title acquisitions from willing landowners through bargain sale, donation, partnerships, or direct purchase.

### **D. RATIONALE**

Selection of habitat enhancement activities on public and private lands were the preferred over other strategies by the public from Lincoln County. These 2 strategies were also the top 2 priorities listed under Alternative Two in the DEIS. The "in lieu of funding" stipulation is as a reflection of the NPPC program guidelines for mitigation programs. The "in lieu of funding" issue can make it difficult to implement habitat enhancement on public lands; therefore, enhancement on both private and public lands were included in the first strategy. The second and third strategies include the use of the conservation

easements from willing or selling landowners. Conservation easements were third under Alternative Two. The fourth strategy includes land exchanges which result in no loss of private land base as a alternative means to achieve mitigation. Fee-title acquisitions are the lowest priority which is consistent with Alternative Two.

#### **E. PROJECT AREAS**

The primary project area is within 15 miles of Lake Koocanusa. The secondary project area is within 50 miles of Lake Koocanusa. The third level is the Columbia basin of Montana as established by the Settlement Agreement.



## SECTION V

### REFERENCES

- American Farmland Trust. 1992. Does Farmland Protection Pay? The Cost of Community Services in Three Massachusetts Towns. Submitted to the Massachusetts Department of Food & Agriculture by the American Farmland Trust, Northeastern Office.
- 1993. The Cost of Community Services in Madison Village and Township Lake County, Ohio. American Farmland Trust, Northeastern Office. Northhampton, Mass.
- Bissell, G.N. and C.A. Yde. 1985. Wildlife and Wildlife Habitat Mitigation Plan for Hungry Horse Hydroelectric Project (Revised). MDFWP, USDE, BPA. Project 83-464. 46pp.
- Casey, D., C.A. Yde and A.O. Olsen. 1984. Wildlife Impact Assessment and Mitigation Summary. Montana Hydroelectric projects Volume III - Hungry Horse Dam. MDFWP-USDE BPA. Final Report Project 83-464. 66pp.
- Montana Audubon Council, 1993. Protecting Montana's Wetlands: An Overview of Montana's Section 404 Program. A report by the Montana Audubon Council. Helena, MT.
- Montana Department of Fish, Wildlife and Parks. 1994. Draft Programmatic Environmental Assessment. Upland Game Bird Habitat Enhancement Program.
- Munding, J. and C. Yde, 1985. Wildlife and Wildlife Habitat Mitigation Plan for Libby Hydroelectric Project. USDE, BPA Project 83-464. Completion Report. 50pp.
- Northwest Power Planning Council, 1987. Columbia River Fish and Wildlife Program Amended February 11, 1987. Portland, Oregon.
- Yde, C. A. and A.O. Olsen. 1984. Wildlife impact assessment and mitigation summary. Montana Hydroelectric Projects Volume I - Libby Dam. MDFWP - -USDE BPA. Final Report Project 83-464. 91pp.



## **APPENDIX A**

### **FWP Response to All Other DEIS Comments**

## APPENDIX A

### RESPONSE TO WRITTEN AND PUBLIC HEARING COMMENTS WHICH WERE NOT ADDRESSED ELSEWHERE IN THE FEIS

#### 1. Concerns voiced about farmland.

##### a. Specific Comments:

- i. 'you cannot forget about the farmers; 485,000 acres out of 3 million belong to farmers'(Van Rinsum-H1)
- ii. 'you did not acknowledge the farmers in your plan; valley floor is held by farmers' (McConkey- H16)
- iii. 'I think that there is no problem with wetland acquisition projects; buying wetlands will not decrease the economic value of a farm because most wetland areas are not the productive areas or are undevelopable anyway; farmers may increase the value of their farms through FWP wetland projects' (Kuhl-H29)
- iv. 'land acquisition will result in the taxable value of the land decreasing; converting farmland to non farm land will lower the taxable value of the land; I think there is an impact on taxes' (Truman-H52)

##### b. FWP Response:

We recognize the agricultural industry serves a vital role in northwest Montana (e.g 17.6% of Flathead County is in rural private ownership and agricultural lands provide county tax income; pp. 26-29 DEIS). We also appreciate the value agricultural lands provide to wildlife, particularly where these lands contain quality riparian and wetland habitats. We also appreciate the values resulting from efforts of the agricultural community to keep their lands in production rather than in subdivision.

The riparian/wetland conservation program is designed to work with willing landowners who want to conserve wildlife values, particularly the riparian/wetland values of their lands as a means of replacing habitats lost due to hydroelectric power development. The available tools can all be tailored to meet the individual landowners needs so that both the landowner and wildlife benefit in the end.

The primary strategies which are emphasized in the proposed alternative include conservation easements and enhancement activities. Both these strategies focus on keeping land in private ownership, thus maintaining existing land uses, and thereby maintaining existing lifestyles, and tax base.

2. Concerns about land management and game damage on protected lands.

a. Specific Comments:

- i. 'we are not picking up any land to feed the waterfowl we raise; ducks and deer can cause damage on ag land from field feeding; there will be a farmers rebellion if we do not do something about game damage' (Van Rinsum-H3)
- ii. 'I have turkeys, ducks, geese all causing game damage on my farm; wild turkey and geese are the major problem; white-tailed deer also cause game damage' (McConkey-H18)

b. FWP Response:

Should a proposal to enhance or purchase riparian/wetland habitat within an agricultural setting be developed as a potential Riparian/Wetland Conservation project, game damage issues would be addressed during the Environmental Assessment process. At this time various site-specific techniques to reduce game damage could be explored such as the planting of lure crops.

3. Concerns with U.S. Fish and Wildlife Service management.

a. Specific Comment:

- i. 'poor management on USFWS land' (Van Rinsum-H2)

b. FWP Response:

In addition to public concerns about the government buying more land, we also recognize there are significant costs associated with the operation and maintenance of any fee-title purchased lands, particularly if the lands include farmland. Costs of managing weeds, cover, excess forage, grazing and other wildlife habitat manipulations as well as paying taxes can be \$20-\$40/acre/year and may make little economic sense if conservation easements or other strategies are more available.

4. Concerns for value of wetlands.

a. Specific Comments:

- i. 'wetlands are more important than just raising ducks and geese' (Cole-H4)
- ii. 'this plan will move towards no net loss of wetlands' (Mitchell-H11)
- iii. '95% of Flathead County surveyed (CPC) believed that water quality was very important; wetlands value never fell below a ranking of 6 out of 14; wetlands benefit many species, not just waterfowl (amphibians, songbirds, T & E spp)' (Mitchell-H12)

**b. FWP Response:**

We recognize that riparian/wetland areas provide highly significant habitats for wildlife as well as other important benefits such as flood control, water quality, nutrient trapping etc. (see p. 20-22, DEIS for description of the benefits of wetland areas for wildlife, pollution, and flood control). A proposed change from a program directed toward prime waterfowl habitat (Alternative One) to a program directed toward riparian/wetland habitat is consistent with this interpretation.

**5. Definitions of wetlands.**

**a. Specific Comment:**

- i. 'you need to be consistent with federal government definitions and criteria concerning wetlands (e.g. Army Corp); I have problems with 4 separate State agencies designating wetlands; agencies should not have the right to change biological definitions' (Jewell-H31)

**b. FWP Response:**

FWP is not a federal agency with jurisdiction over wetlands under Clean Water Act or other federal program; we do not define or delineate jurisdictional wetlands. For the purpose of this program, we will adopt existing functional definitions for riparian and wetlands to insure consistency with other agencies and institutions.

**6. Land Acquisition, Condemnation, and Linkage Concerns.**

**a. Specific Comments:**

- i. "We are generally opposed to the idea of linkage or connecting areas (corridors?) because it allows MFW&P the leeway to acquire any land they want, under the guise of linkage areas." (G&T-W15)
- ii. 'land acquisition should be priority # 3 and FEC board wants adherence to this policy; I personally oppose land acquisition and I think that you have heard this before' (McConkey-H22)
- iii. 'people in the Flathead valley support land acquisition By FWP' (Kuhl-H30)
- iv. 'I am against condemnation of private lands; pressure on private citizens to condemn land has been used in the past' (Jewell-H33)
- v. 'no private land acquisition in Lincoln County' (Newton-H49)
- vi. 'I support enhancement projects on public land; any loss of private land is important to me in Lincoln County' (Truman-H54)

**b. FWP Response:**

Issues surrounding land acquisition were raised during the public scoping meetings in 1993 and became the central theme around which the various DEIS alternatives were

developed. The riparian/wetland program will only work with interested and willing landowners; condemnation is not an option under this mitigation program. Under Habitat Montana, the original FWP mitigation guidelines and Alternative Two, the Proposed Alternative, we specified that fee-title purchase will be a lower priority than conservation easements.

Under the Preferred Alternative, we propose to maintain fee-title purchase as a secondary emphasis and subject this option to other conditions: a. purchase property with intent to place a conservation easement on the property and re-sell or trade such property back to private individual; or, b. use fee-title purchase when access, recreation, or values other than just habitat conservation are deemed highly important to public and are cost-shared as part of the fee-title purchase agreement.

**7. Habitat Losses due to dam construction**

**a. Specific Comment:**

- i. 'this plan targets too many acres of wetlands as not that much was originally lost' (Jewell-H37)

**b. FWP Response**

The 2 hydroelectric projects affected approximately 18,702 acres of riparian/wetland habitats along the South Fork and Kootenai Rivers. The goal of Alternative One, Status Quo, was to replace waterfowl habitat losses through protection and enhancement of "prime wetlands" and bear habitat through the protection of riparian and shrubfield habitats. The other considered Alternatives utilized the actual acres of different riparian/wetland habitat types which were lost due to hydroelectric power development. These losses were defined using aerial photographs of the reservoir areas taken prior to dam construction. These loss estimates were outlined in original impact assessment reports (Casey et al. 1984 and Yde and Olsen 1984). The rationale for modifying target acreages based on strategy are: 1:1 for fee-title because the habitat would be exclusively managed for wildlife; 2:1 for conservation easement as existing land uses are preserved as well as the habitat; and as much as 3:1 for enhancement because enhancement may only improve riparian/wetland values incrementally. These issues are discussed in this FEIS under issue 4.b.ii. and 5.b.iii. "Crediting Assumptions."

**8. Trust Fund Budget.**

**a. Specific Comments:**

- i. 'wetlands are more important than half of the interest from the trust'; 'more mitigation money should be spent on the wetland program' (Cole-H6)
- ii. 'the budget should not be altered without public input' (Jewell-H39)
- iii. 'a larger percent of the Trust should be spent on this plan now' (Fairchild-H26)
- iv. 'do not spend principal, only interest' (Windom-H44)

**b. FWP Response:**

The present policy for expending Trust Fund dollars is to spend the interest only. We concur that the riparian/wetland conservation portion of the wildlife mitigation program is very important and must be implemented as soon as possible. The proportion of the Trust Funds spent on various wildlife programs is an issue we plan to address during the 10-year evaluation of the overall mitigation program in 1996. At that time, all the issues surrounding how the money should be spent to maximize wildlife habitat mitigation can be fully evaluated.

**8. Concerns about Physical Impacts.**

**Specific Comments and FWP Responses**

- i. "Page 20 under Physical Environment, second paragraph, the physical environment has also been altered by recreation, fishing and hunting activities." (G&T-W8)

**FWP Response:** We assumed recreation, fishing and hunting activities (page 20) would fall under "human activities;" those depicted included the most obvious large scale types of activities.

- ii. "Page 23, Section 6. It is hard to imagine how global warming would adversely affect amphibians and reptiles in Montana. It seems global warming would help increase the populations of those critters in Montana" (G&T-W9)

**FWP Response:** The scientific community has listed many environmental factors which may be causing the observed global decline in amphibians and reptiles one of which may be global warming. Under this scenario, changes in temperature and moisture regimes could have a significant impact on distribution, quality, and abundance of amphibian habitat.

- iii. "Page 24 under Section 8, Birds. isn't it true there are a number of species which are increasing in population in northwest Montana?... geese, sandhill cranes..." (G&T-W10)

**FWP Response:** It is true that many waterfowl species populations are on the upswing in northwest Montana, particularly Canada geese. However, on a national scale, waterfowl experts are concerned about the effect of habitat losses and our ability to reverse downward trends and stabilize or increase waterfowl populations.

- iv. "Page 27, Section 2a. Using a newspaper article as a reference is not credible when preparing an EIS. You should quote a noted scientist or peer-reviewed papers". (G&T-W11)

**FWP Response:** The Missoulian article was used simply to illustrate the recent population trend in growth in northwest Montana. It was considered a reliable reference for that purpose.



- v. 'wetland creation may create stagnated water and more problems with stream sedimentation; wetland creation may affect some species negatively' (Truman-H53)

**FWP Response:** During construction of a wetland or wetland structure such as a dike or ditch, there will be associated impacts to the environment which may include sedimentation. Additionally, there will be an impact to the vegetation being removed or flooded and consequently to associated wildlife. These impacts will be considered during the Environmental Assessment for each proposed project. Enhancement projects will not be pursued unless there is a reasonable expectation of a net benefit to wildlife.

**10. Concerns about Social-Economic Environment and Impacts.**

**a. Specific Comment:**

'there are more negative impacts than you predict; where you say a positive impact on communities there may be neutral or even negative impacts; all impacts in tables should be shifted towards the negative side' (Jewell-H40)

**b. FWP Response:**

In the DEIS, all impact analyses compared each considered alternative against Alternative One, Status Quo. Because Alternative One includes fee-title purchase as a major strategy, this may explain why some of the community impacts of Alternatives Two and Four are more positive. Effects of no mitigation are considered because we are legally obligated to mitigate for wildlife habitat losses as described under the background section of this document.

**11. Miscellaneous Comments and Opinions.**

**Specific Comments and FWP Responses:**

- i. "The Wetlands Plan should continue to focus on the creation of a wildlife management area in the lower Flathead Valley where there is an opportunity to concentrate a number of wetlands purchases." (Ili-W30)

**FWP Response:** Our plan would not create a public wildlife management area. Reasons and rationale for our preferred option are described in this FEIS. Our mitigation program should, however, contribute to a network of key wildlife habitat that will help to perpetuate wildlife population into the future.

- ii. "On page 26, the listing of land ownership does not include the acreage of Tribal lands within the Flathead County land ownership description. It should be noted that Tribal lands within Flathead County also include the area encompassed by Flathead Lake and other bodies of water located within the Reservation." (CSKT-W43)

**FWP Response:** It was an oversight to exclude information about the amount of tribal or Reservation land by Flathead County. Most of the Reservation falls within Lake County.

- iii. "On page 27, we question the percentages of land ownerships within Lake County. These figures need to be checked for accuracy. Again, these acreages should include Flathead Lake and other water bodies within the Reservation." (CSKT-W44)

**FWP Response:** These data were obtained from the Flathead Economic Development Council and were used only to display the land ownership patterns at the time the DEIS was written. Acreages from the south half of Flathead Lake and other bodies of water within the Flathead Indian Reservation were not used in this calculation.

- iv. "On page 29, we question why Tribal government is not listed in the table of employment statistics. Also on page 29, a discussion of contributions to local tax bases by various governmental entities, such as in lieu of payments, should be included to provide a more accurate summarization of positive and negative economic impacts." (CSKT-W45)

**FWP Response:** We included tribal employment within the local government statistic. The most recent information on payment in lieu of taxes (PILT) and federal forest receipts for all 3 counties for 1994 for each county is listed below:

<u>County</u>	<u>Flathead</u>	<u>Lake</u>	<u>Lincoln</u>
PILT	\$244,879	\$45,812	\$ 178,154
Fed. Forest Receipts	\$848,223	\$57,487	\$6,187,417

- v. 'this document is very readable for an EIS' (Mitchell-H13)

**FWP Response:** Thank you for your review and input into this decision-making process.

- iii. 'I do not like the new \$1,500.00 tax rule' (Levandowski-H14)

**FWP Response:** This is related to legislative actions and not the DEIS.

- iv. 'there is a lack of listening at these hearings' (McConkey-H15)

**FWP Response:** One key purpose of the EIS process is to get public input which helps us evaluate the impacts of these decisions. We held numerous scoping and public hearings to get this input; we believe the Alternatives reflect a reasonable balance to all the public concerns that were expressed.

- v. 'I do not like and object to the term ecosystem management' (Jewell-H32)

**FWP Response:** This term is one of today's catch words and could imply many meanings. In the context of the Riparian/Wetland Mitigation Program, we used this definition: natural resource planning and management activities that assure consideration of the relationships between all organisms and their environment to achieve productive

resource management by blending social, physical, economic, and biological needs and values to provide healthy ecosystems (DEIS p. 79, Appendix 1). Within the riparian/wetland program this implies that we need to look at the whole river/wetland system and see where we can put together a project which is integral part of an intact functioning river/wetland system or is a functioning system unto itself. We may want to consider project relationships, species interactions and the habitat's relationships to the local community and economy. In other words, we may need to do more than put together a few isolated projects.

- vi. 'by using environmentalist terms in the document you will place restrictions on private citizens' (Jewell-H38)

**FWP Response:** Terms appearing in this document are those commonly accepted terms often used in the scientific and academic communities.

- vii. 'FWP as professional biologists should manage wildlife and habitat by biological opinion, not management by public referendum' (Fairchild-H27)

**FWP Response:** We as a government agency must be responsive to all issues and concerns, not just biological ones. Through the EIS process, we must disclose all the environmental effects of our program, including socio-economic ones, and obtain and consider public input. In our final decision, we need to respond to public concerns; however, our final decision must be the best decision we can make to meet our legal objectives, weighing the environmental effects, and respond to public concerns; it may well differ from some of the expressed public sentiments.

- viii. 'game habitat in Lincoln County is not broken, game abounds; these mitigation efforts may not be needed; I have 9 deer in my yard and 50 elk at the golf course' (Windom-H45)

**FWP Response:** We recognize that deer and elk populations are thriving across northwest Montana. However, Montana has accepted the responsibility to undertake mitigation for the wildlife impacts resulting from the construction of two major hydroelectric power projects. The focus of the program is to replace all the wildlife values associated with 18,702 acres of riparian/wetland habitat which were lost due to dam construction. Our focus is to conserve remaining riparian/wetland habitats to benefit all wildlife species as well as other aspects of the environment (e.g. water quality) not just replacing common species.

- ix. 'good range of alternatives; easy to read document' (Young-H50)

**FWP Response:** Thank you for your review and input into this decision-making process.



## **APPENDIX B**

**Summary Impact Tables on Environmental Effects from DEIS**

## APPENDIX B

Table 3. Summary of impacts on the socioeconomic environment (0 = no impact, + = slight positive impact, ++ = moderate positive impact, +++ = potentially significant positive impact, - = slight negative impact, -- = moderate negative impact, --- = potentially significant negative impact).

MEPA Impact Analysis Categories	Alt 1 No Action	Alt 2 Preferred Alt	Alt 3 Protect Only	Alt 4 Enhance Only
Land Use Flathead	-	-	--	-
Land Use Lincoln	0	-	--	-
Land Use Lake	0	-	--	-
Communities Flathead	+	++	++	+
Communities Lincoln	0	++	++	+
Communities Lake	0	++	++	+
Property Taxes Flathead	0	0	0	0
Property Taxes Lincoln	0	0	0	0
Property Taxes Lake	0	0	0	0
Aesthetics and Recreation	+	++	++	+
Cultural and Historical Resources	0	0	0	0

Table 1. Summary of impacts on the physical environment (0 = no impact, + = slight positive impact, ++ = moderate positive impact, +++ = potentially significant positive impact, - = slight negative impact, -- = moderate negative impact, --- = potentially significant negative impact).

MEPA Impact Analysis Categories	Alt 1 No Action	Alt 2 Preferred Alt	Alt 3 Protect Only	Alt 4 Enhance Only
air	0	0	0	0
water	++	+++	+++	+++
land resource	++	+++	+++	+++

Table 2. Summary of impacts on the biological environment (0 = no impact, + = slight positive impact, ++ = moderate positive impact, +++ = potentially significant positive impact, - = slight negative impact, -- = moderate negative impact, --- = potentially significant negative impact).

MEPA Impact Analysis Categories	Alt 1 No Action	Alt 2 Preferred Alt	Alt 3 Protect Only	Alt 4 Enhance Only
biodiversity	+	++	++	++
wetland vegetation	+++	+++	+++	+++
riparian vegetation	0	+++	+++	+++
T & E species	++	++	++	++
invertebrates	+	++	++	++
amphibians/reptiles	++	++	++	++
fish	+	++	++	++
waterbirds	+++	+++	+++	+++
migratory landbirds	+	++	++	++
resident landbirds	+	++	++	++
small mammals	+	++	++	++
furbearers/predators	+	+++	+++	+++
large mammals	+	++	++	++





## **APPENDIX C**

**Hungry Horse and Libby Wildlife Mitigation Plan;  
Ammendment to the Northwest Power Council's  
Fish and Wildlife Program (NPPC 1987)**

## APPENDIX C

### Section 1000

**Table 4**  
*Wildlife Mitigation*  
*Projects*

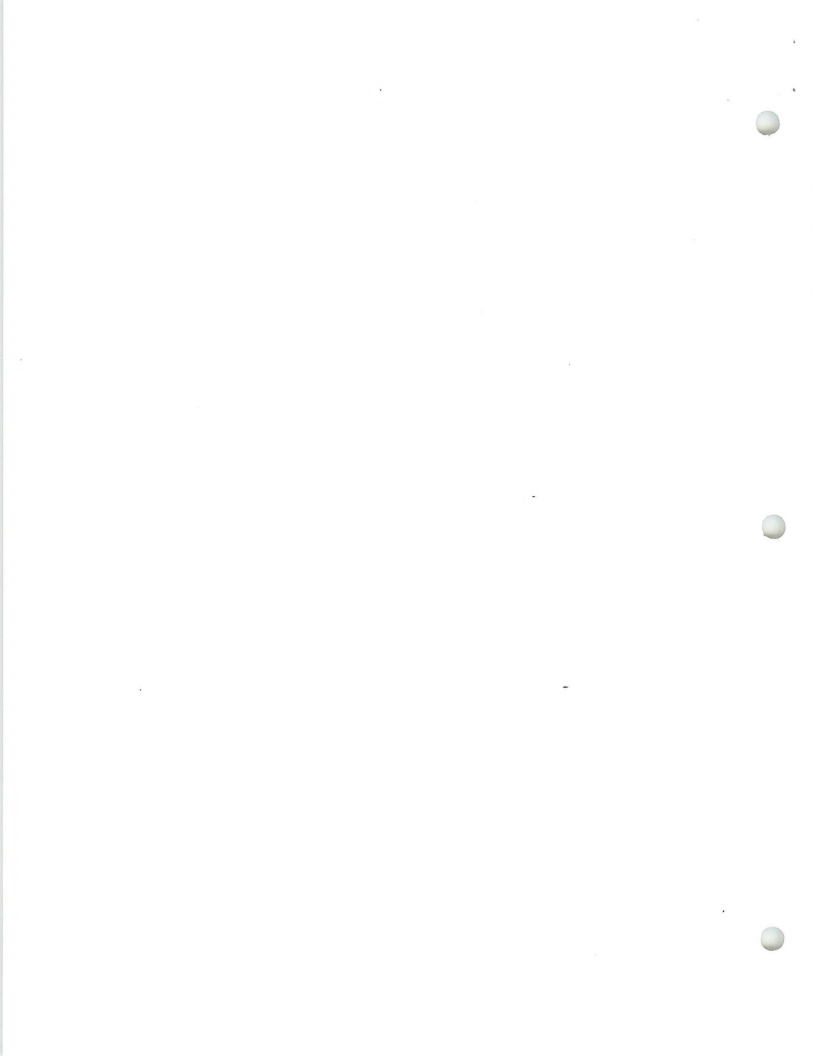
Project or Area	Target Species	Wildlife or Habitat Losses Attributable to Hydropower	Mitigation Goal Projects/Schedule
Hungry Horse Dam	Elk/ Mule Deer	133 elk 6,650 acres of winter range	Bonneville shall fund projects to enhance and maintain winter range on Flathead National Forest lands to support a target carrying capacity of an additional 133 elk. Total number of acres to be treated will be established when the increase in carrying capacity for winter range enhancement is determined. An initial limit of 6,650 acres of winter range will be enhanced until increased carrying capacity is determined. Year 1, advanced design. Years 1-5, implement, test and monitor; report to Council for further action.
	Black Bear	27-34 animals 8,590 acres of critical habitat	Bonneville shall fund projects to protect 8,590 acres of riparian habitat and travel corridors through the acquisition of conservation easements. Years 1-2, advanced design; interagency coordination; prioritizing sites; appraisals. Upon completion, acquire easements.
	Grizzly Bear	2-4 animals 8,590 acres of critical habitat	
	Waterfowl	1,863 acres (1,146 acres of prime habitat)	Bonneville shall fund projects to protect and/or enhance 1,146 acres of wetland habitat in Flathead Valley. Same schedule as bear projects.
	Terrestrial Furbearers	11,050 acres	Bonneville shall negotiate cooperative agreements with state and federal agencies and private landholders to protect 11,050 acres of selected old-growth forest stands. Years 1-2, advanced design; report to Council for further action.
Libby Dam	White-tailed Deer	1,340 animals 8,745 acres of winter range	Bonneville shall fund projects to enhance and maintain winter range in northwestern Montana to support a target carrying capacity of an additional 1,340 white-tailed deer. Total number of acres to be treated will be established when the increase in carrying capacity for winter-range enhancement is determined. An initial limit of 8,745 acres will be enhanced until increased carrying capacity is determined. Years 1-2, advanced design. Years 3-10, implement and monitor.

## Section 1000

**Table 4**  
(continued)

Project or Area	Target Species	Wildlife or Habitat Losses Attributable to Hydropower	Mitigation Goal Projects/Schedule
	Mule Deer	485 animals 10,586 acres	Bonneville shall fund projects to enhance and maintain winter range on Kootenai National Forest lands adjacent to Lake Koocanusa to support a target carrying capacity of an additional 485 mule deer. Total number of acres to be treated will be established when the increase in carrying capacity is determined. An initial limit of 10,586 acres will be enhanced until increased carrying capacity is determined. Year 1, advanced design. Years 2-10, implement and monitor.
	Bighorn Sheep	66 sheep 3,190 acres	Bonneville shall fund projects to enhance and maintain winter/spring range on Kootenai National Forest lands adjacent to Lake Koocanusa to support a target carrying capacity of an additional 66 sheep. Total number of acres to be treated will be established when the increase in carrying capacity for habitat enhancement is determined. An initial limit of 3,190 acres will be enhanced until increased carrying capacity is determined. Year 1, advance design. Years 2-10, implement and monitor.
	Columbian Sharp-tailed Grouse	2,462 acres	Bonneville shall fund projects to protect 2,462 acres of prairie habitat within the vicinity of Tobacco Plains. Years 1-2, advanced design. Years 3-10, acquire easements.
	Waterfowl	10,460 acres (3,418 acres of prime habitat)	Bonneville shall fund projects to protect and/or enhance 3,418 acres of wetland habitat within the Flathead Valley. Years 1-2, advanced design. Years 3-10, upon completion of design, implement projects.

**Further Action:** Bonneville shall consult with the Montana Department of Fish, Wildlife and Parks, the Corps, Bureau of Reclamation and Bonneville customers to explore alternative methods, including a trust fund, for financing wildlife mitigation measures at Hungry Horse and Libby dams. If all relevant parties reach agreement on a suitable method for financing and on an alternative package of mitigation projects, Bonneville shall fund the projects covered by that agreement, upon approval by the Council.



## **APPENDIX D**

**FWP Draft Wildlife Mitigation Policy - 1983**

## APPENDIX D

May 31, 1983

### MONTANA DEPARTMENT OF FISH, WILDLIFE, AND PARKS

#### MITIGATION GUIDELINES

When mitigation as provided by law is proposed for development projects, the Montana Department of Fish, Wildlife, and Parks shall request funding from the developer, or the appropriate agency, to conduct those studies necessary to determine impacts of the development on fish and wildlife and their habitat and to develop a project specific mitigation plan.

#### WILDLIFE SECTION

The principle objective of the mitigation plan shall be to mitigate within the project area impacts to wildlife and to compensate for animal losses attributable to the development project. The plan shall identify measures to maintain populations of affected species. The plan shall prescribe appropriate measures to document the implementation of the mitigation package, to monitor wildlife response to those measures, and to document the sufficiency of mitigation.

The Montana Department of Fish, Wildlife, and Parks shall request funding from the developer, or the appropriate agency, to implement, monitor, and document the mitigation measures prescribed in the mitigation plan.

Selection of mitigation measures for terrestrial species shall be determined by the following criteria:

- A. The mitigation objective shall be to replace, on an animal for animal basis, animal losses attributable to the development project and to ensure the replacement of lost animal production into the future. This objective may be modified according to this priority:
  1. To replace, on an animal for animal basis, animal losses specifically attributable to the development project.
  2. To replace, on an animal for animal basis, some of the animal losses and an appropriate equivalent of animals of other species.
  3. To replace, on an animal for animal basis, an appropriate equivalent of other species.
- B. Mitigation measures:
  1. The highest priority shall be assigned to the development and implementation of measures to enhance wildlife habitat on land owned by other agencies, corporations, or individuals, without the Department acquiring management authority to those lands.

Implementation of enhancement measures shall be dependent upon cooperative agreements with the appropriate land management agencies and a land allocation compatible with mitigation objectives. The Department shall request funding for implementation of those measures, including operation and maintenance for

the life of the development project, and, when appropriate, research and development of enhancement measures.

2. If the Department cannot negotiate agreements to implement enhancement measures on lands in other ownership within a reasonable time, then the Department shall attempt to acquire management authority over lands identified in the mitigation plan. Acquisition of management authority by conservation easement, when applicable, shall have priority over acquisition by fee title from willing sellers. Lands to be acquired shall be determined by priorities established by this policy, while procedures for acquisition shall be consistent with principles outlined in the Department's statewide habitat acquisition policy. The Department shall develop a management plan for acquired lands. The Department shall request the developer, or the appropriate agency, to acquire the lands and to provide funding for development of the management plan, research and development appropriate to the management of those lands, and ongoing operation and maintenance of those lands.
  3. On new projects, the Department shall request that mitigation lands be acquired at the same time as other project lands and be included in basic project costs.
- C. The location of mitigation projects shall be consistent with the mitigation objectives, and be determined according to the following priority:
1. Immediate vicinity of the development project or within the annual range of the species affected.
  2. Within the county (or within a 50-mile radius) of the development project.
  3. Within the corresponding Department of Fish, Wildlife, and Parks administrative region.
  4. Within Montana.
- D. Mitigation measures shall feature those species identified in Section A-1, 2 or 3, consistent with the mitigation objective. Those species shall have priority at all projects within location priorities Section C-1, 2, and 3. Thereafter, features species shall be determined by SCORP.

Decisions regarding acceptance or rejection of proposed mitigation recommendations shall be made with full public knowledge, input, and review.

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_





## **APPENDIX E**

### **Environmental Assessment Checklist for Potential Projects**

## APPENDIX E

### ENVIRONMENTAL CHECKLIST FOR WETLAND AND RIPARIAN HABITAT MITIGATION PROJECTS

This section describes a potential checklist environmental assessment that would be used for individual wetland and riparian habitat projects. Potential impacts on the physical, biological, and socioeconomic environment of Montana are explored. An "other" impact category is also included to explore potential impacts on other aspects of the physical, biological, and socioeconomic environment not listed.

When completing the following section consider the potential positive or negative impacts that could occur as a result of implementing a potential wetland or riparian habitat mitigation project. Please indicate (+) or (-) in the appropriate category.

#### Physical Environment:

##### a) Air Quality

☐ None    ☐ Minor    ☐ Potentially Significant

##### b) Water Quality

☐ None    ☐ Minor    ☐ Potentially Significant

##### c) Land Resource

☐ None    ☐ Minor    ☐ Potentially Significant

##### d) Other \_\_\_\_\_

☐ None    ☐ Minor    ☐ Potentially Significant

#### Biological Environment:

##### a) Biodiversity

☐ None    ☐ Minor    ☐ Potentially Significant

##### b) Wetland Vegetation

☐ None    ☐ Minor    ☐ Potentially Significant

##### c) Riparian Vegetation

☐ None    ☐ Minor    ☐ Potentially Significant

d) Threatened or endangered species

☐ None ☐ Minor ☐ Potentially Significant

e) Invertebrates

☐ None ☐ Minor ☐ Potentially Significant

f) Amphibians/reptiles

☐ None ☐ Minor ☐ Potentially Significant

g) Fish

☐ None ☐ Minor ☐ Potentially Significant

h) Waterbirds

☐ None ☐ Minor ☐ Potentially Significant

i) Migratory landbirds

☐ None ☐ Minor ☐ Potentially Significant

j) Resident landbirds

☐ None ☐ Minor ☐ Potentially Significant

k) Small mammals

☐ None ☐ Minor ☐ Potentially Significant

l) Furbearers/predators

☐ None ☐ Minor ☐ Potentially Significant

m) Large mammals

☐ None ☐ Minor ☐ Potentially Significant

d) Other \_\_\_\_\_

☐ None ☐ Minor ☐ Potentially Significant

**Socioeconomic Environment:**

a) County land use

☐ None ☐ Minor ☐ Potentially Significant

b) County Communities

☐ None    ☐ Minor    ☐ Potentially Significant

c) County property taxes

☐ None    ☐ Minor    ☐ Potentially Significant

d) Aesthetics/recreation

☐ None    ☐ Minor    ☐ Potentially Significant

e) Cultural/historical resources

☐ None    ☐ Minor    ☐ Potentially Significant

d) Other \_\_\_\_\_

☐ None    ☐ Minor    ☐ Potentially Significant

**SUMMARY**

**Explain minor negative impacts in a narrative format:  
(attach additional pages as necessary)**

**Will the project result in any negative cumulative or secondary impacts?**

**If "yes" explain and determine if cumulative or secondary impacts would be potentially significant (attach additional pages as necessary)**

Does the project have any potentially significant negative impacts?

If "no" further environmental review is not necessary

If "yes" can all the impacts be mitigated?

\* If "yes" prepare a mitigated EA or EIS

\* If "no" prepare an EIS

Title: \_\_\_\_\_

Prepared by: \_\_\_\_\_

Date: \_\_\_\_\_

